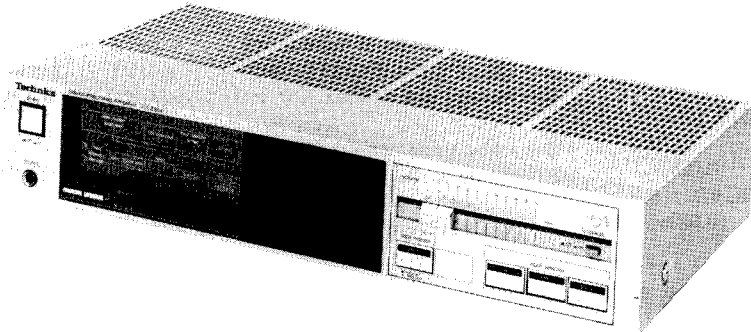


Service Manual

Amplifier

Stereo Integrated Amplifier

SU-Z650



Colors

(S) Silver type
(K) Black type

Color	Area
(S) (K)	[PC] European Audio Club
(S)	[EF] France

Please use this manual together with the service manual for model No. SU-Z600 [M],
Order No. HAD84052776C1.

SPECIFICATIONS

(DIN 45 500)

■ AMPLIFIER SECTION

1 kHz continuous power output both channels driven	2 × 70W (8Ω)
20 Hz~20 kHz continuous power output both channels driven	2 × 60W (8Ω)
Total harmonic distortion	
rated power at 20 Hz~20 kHz	0.02% (8Ω)
half power at 20 Hz~20 kHz	0.01% (8Ω)
half power at 1 kHz	0.003% (8Ω)
-26 dB power at 1 kHz	0.007% (8Ω)
50 mW power at 1 kHz	0.007% (8Ω)
Intermodulation distortion	
rated power at 250 Hz: 8 kHz=4:1, 8Ω	0.02%
rated power at 60 Hz: 7 kHz=4:1, SMPTE, 8Ω	0.02%
Power bandwidth	
both channels driven, -3 dB	5 Hz~25 kHz (8Ω, 0.02%)
Residual hum and noise	0.8 mV
Damping factor	60 (8Ω)
Input sensitivity and impedance	
PHONO	2.5 mV/47kΩ
TUNER, CD/VIDEO/AUX, TAPE	150 mV/22kΩ
PHONO maximum input voltage (1 kHz, RMS)	150 mV
S/N	
rated power (8Ω)	
PHONO	75 dB (IHF, A: 81 dB)
TUNER, CD/VIDEO/AUX, TAPE	86 dB (IHF, A: 97 dB)
-26 dB power (8Ω)	
PHONO	65 dB
TUNER, CD/VIDEO/AUX, TAPE	65 dB
50 mW power (8Ω)	
PHONO	61 dB
TUNER, CD/VIDEO/AUX, TAPE	62 dB

Frequency response

PHONO

RIAA standard curve
±0.8 dB (30 Hz~15 kHz)

TUNER, CD/VIDEO/AUX, TAPE

10 Hz~80 kHz (-3 dB)

Tone controls

BASS

50 Hz, +10 dB~ -10 dB

TREBLE

20 kHz, +10 dB~ -10 dB

Loudness control (volume at -30 dB)

50 Hz, +9 dB

Output voltage and impedance

REC OUT

150 mV

Channel balance, CD/VIDEO/AUX 250 Hz~6,300 Hz

±1 dB

Channel separation, CD/VIDEO/AUX 1 kHz

55 dB

Headphones output level and impedance

600 mV/330Ω

Load impedance

MAIN or REMOTE

4Ω~16Ω

MAIN and REMOTE

8Ω~16Ω

■ GENERAL

Power consumption

360W

Power supply

For France

AC 50 Hz/60 Hz 220V

For European Audio Club

AC 50Hz/60Hz 110V/120V/220V/240V

Dimensions (W×H×D)

430 × 86 × 240 mm

(16-15/16" × 3-3/8" × 9-7/16")

Weight

5.8 kg

(12.9 lb.)

Note:

Total harmonic distortion is measured by the digital spectrum analyzer (H.P. 3045 system).

Specifications are subject to change without notice for further improvement.

Technics

Matsushita Electric Trading Co., Ltd.

P.O. Box 288, Central Osaka Japan

CARACTERISTIQUES

(DIN 45 500)

SECTION AMPLIFICATEUR F (100~499)

Puissance de sortie continue à 1 kHz	
les deux canaux en circuit	2 × 70W (8Ω)
Puissance de sortie continue de 20 Hz~20 kHz,	
les deux canaux en circuit	2 × 60W (8Ω)
Distorsion harmonique totale	
à puissance nominale (20 Hz~20 kHz)	0,02% (8Ω)
à demi-puissance (20 Hz~20 kHz)	0,01% (8Ω)
à demi-puissance (1 kHz)	0,003% (8Ω)
puissance de -26 dB à 1 kHz	0,007% (8Ω)
puissance de 50 mW à 1 kHz	0,007% (8Ω)
Distorsion d'intermodulation	
à puissance nominale à 250 Hz: 8 kHz=4:1, 8Ω	0,02%
à puissance nominale à 60 Hz: 7 kHz=4:1, SMPTE, 8Ω	0,02%

Réponse de fréquences

les deux canaux en circuit, -3 dB
5 Hz~25 kHz (8Ω, 0,02%)

Bruit et ronflement résiduels 0,8 mV

Coefficient d'amortissement 60 (8Ω)

Sensibilité et impédance d'entrée

PHONO 2,5 mV/47kΩ

SYNTONISATEUR, CD/VIDEO/AUX, TAPE/EXT

150 mV/22kΩ

PHONO (tension d'entrée maximum, 1 kHz RMS) 150 mV

Signal/Bruit

à puissance nominale (8Ω)

PHONO 75 dB (IHF, A: 81 dB)

SYNTONISATEUR, CD/VIDEO/AUX, TAPE/EXT

86 dB (IHF, A: 97 dB)

puissance de -26 dB (8Ω)

PHONO 65 dB

SYNTONISATEUR, CD/VIDEO/AUX, TAPE/EXT

65 dB

puissance de 50 mW (8Ω)

PHONO 61 dB

SYNTONISATEUR, CD/VIDEO/AUX, TAPE/EXT

62 dB

Réponse de fréquence

PHONO Courbe nominale RIAA
±0,8 dB (30 Hz~15 kHz)

SYNTONISATEUR, CD/VIDEO/AUX, TAPE/EXT
10 Hz~80 kHz (-3 dB)

Réglage de la tonalité

BASSES (BASS) 50 Hz, +10 dB~-10 dB

AIGUS (TREBLE) 20 kHz, +10 dB~-10 dB

Compensateur physiologique (volume à -30 dB)
50 Hz, +9 dB

Tension de sortie et impédance

SORTIE ENREGISTREMENT (REC OUT) 150 mV

Equilibrage des canaux, CD/VIDEO/AUX 250 Hz~6 300 Hz

±1 dB

Séparation des canaux, CD/VIDEO/AUX 1 kHz 55 dB

Niveau de sortie des casques et impédance 600 mV/330Ω

Impédance de charge

PRINCIPALE ou AUXILIAIRE (MAIN or REMOTE)

4Ω~16Ω

PRINCIPALE et AUXILIAIRE (MAIN and REMOTE)

8Ω~16Ω

DIVERS

F (700~799)

Consommation

360W

Alimentation CA 50Hz/60Hz, 220V

Dimensions (L×H×Pr) 430 × 86 × 340 mm

Poids 5.8- kg

Nota:

La Société NATIONAL-PANASONIC-FRANCE, importateur du matériel MATSUSHITA-ELECTRIC déclare que cet appareil est conforme aux prescriptions de la directive 76/889/C.E.E. (arrêté 14 Janvier 1980).

Remarque:

On mesure la distorsion harmonique totale au moyen d'un analyseur de spectre digital (Système H.P. 3045).

Sujet à changement sans préavis.

BEFORE REPAIR AND ADJUSTMENT

For [PC] and [EF] areas

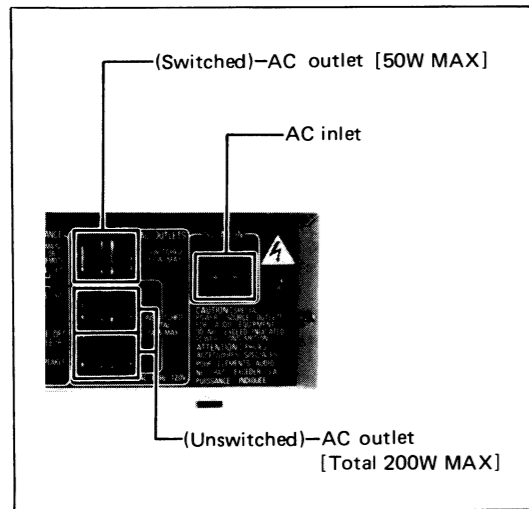
1. Turn off the power supply and short-circuit of power supply capacitors (C904, C905, 8200μF) at resistance (about 10Ω, 5W) in order to discharge the charged voltage. Do not short between C904 and C905 by screwdriver. It may damage the component.
2. Before turning on the power supply after completion of repair, slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current is free of abnormality. The consumed current at 60Hz/50Hz in no signal mode is shown below with respect to supply voltage 110V/120V/220V/240V.

Power supply voltage		AC110V	AC120V	AC220V	AC240V
Consumed current	50Hz/60Hz	245 ~ 408mA	222 ~ 372mA	126 ~ 210mA	114 ~ 191mA

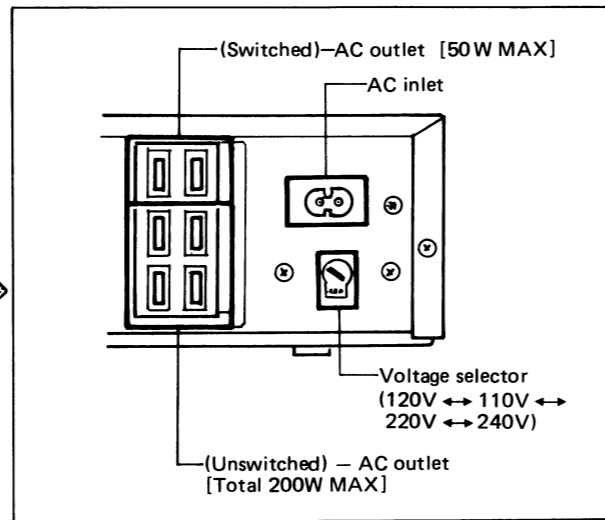
LOCATION OF CONTROLS

- Change in the rear panel

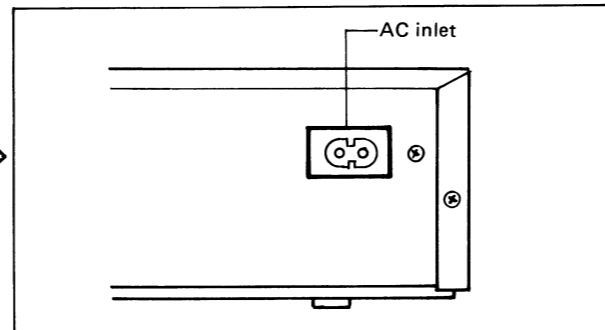
For [M] area



For [PC] area



For [EF] area



CHANGE IN REPLACEMENT PARTS LIST

Notes:

1. Mentioned in this parts list are only those changed in Model No. SU-Z600.
2. Important safety notice: Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. \otimes - marked parts are used for black only, while \circ - marked parts are for silver type only.
4. Part other than \otimes - and \circ - marked are used for both black and silver type.
5. Bracketed indications in Ref. No. columns specify the area. Parts without these indications can be used for all areas.
6. The "S" mark is service standard parts and may differ from production parts.

Ref. No.	Change of Part No.		Area & Color	Part Name & Description
	SU-Z600[M]	→ SU-Z650[PC,EF]		
RESISTORS				
R415, 416	ERD25FJ331	ERDS2TJ331		Carbon, 1/4W, 330 Δ
R619	Addition	ERDS2TJ562		Carbon, 1/4W, 5.6K Δ
R658	ERG2ANJ182	ERG2ANJ152		Metal Oxide, 2W, 1.5K Δ
R659, 660	Addition	ERDS2TJ472		Carbon, 1/4W, 4.7K Δ
CAPACITORS				
C5, 6	ECKD1H471KB	ECKD1H102KB		Ceramic, 50V, 0.001 S
C450	Addition	ECEA1EU4R7		Electrolytic, 25V, 4.7
C811	Addition	ECEA1HU010		Electrolytic, 50V, 1
C903	ECKD2H103PF	ECKD2H103PF	[PC]	Ceramic, 500V, 0.01 Δ
		ECQM1224MZ	[EF]	Polyester, 100V, 0.22 Δ
C906	Addition	ECEA1HU010	[EF]only	Electrolytic, 50V, 1
TRANSFORMER				
T901	SLT5U49	SLT5U51		Power transformer Δ
FUSE				
F1	XBA1F40NU14	XBA2C12TR0		250V, T1.2A Δ
F2	Addition	XBA2C25TR0	[PC]only	250V, T2.5A Δ
SWITCHES				
S6	ESD3911T	SSS154		Impedance selector Δ
S7	Addition	ESE37219	[PC]only	Voltage selector Δ
CABINET and CHASSIS PARTS				
2	SGU419-2	SGU419	\circ	Transparent Cover
		SGU419-2	\otimes	
3	SGX7693-1	SGX7693	\circ	Ornament
		SGX7693-1	\otimes	
10	SGW8250BB	SGW8250S96A1	\circ	Front Panel
		SGW8250K99A1	\otimes	

Ref. No.	Change of Part No.		Area & Color	Part Name & Description
	SU-Z600[M]	→ SU-Z650[PC,EF]		
14	SGXUZ600-KM	SGXUZ650-KM		Case
16	SGXUZ600-KM1	SGXUZ600-SE1	\circ	Ornament, Volume knob
		SGXUZ600-KM1	\otimes	
17	SGU420	SGU420-6		Transparent Cover
22	SKUUZ600-KM	SKUUZ650-SQ	[PC]	Bottom Board
		SKUUZ650-SF	[EF]	
26	SJS9328B	SJS9328B	[PC]only	Socket, AC Outlet Δ
29	SKC1550BB1	SKC1550S1	\circ	Cabinet
		SKC1550BB1	\otimes	
31	SJS9328A	SJS9328A	[PC]only	Socket Cover, AC Outlet Δ
38	SGP6261-2A	SGP6261-4A	[PC]	Rear Panel
		SGP6251-5A	[EF]	
43	SJT345	SJT347		Holder, Fuse
SCREWS				
N4	SNE2095-5	SNE2095-4	\circ	Tapping
		SNE2095-5	\otimes	
ACCESSORIES				
A1	SJA170	SJA168	[PC]	AC Cord Δ
		SJA171	[EF]	
A2	SQF12164	SQF12222	[PC]	Instruction Book
		SQF12223	[EF]	
A3	Addition	SJP9215	[PC]only	Plug Adaptor Δ
PACKING PARTS				
P5	SPG4964	SPG5072	[PC]	Carton Box
		SPG5073	[EF]	
P6	Addition	SGK1413	\otimes	Label (Black)

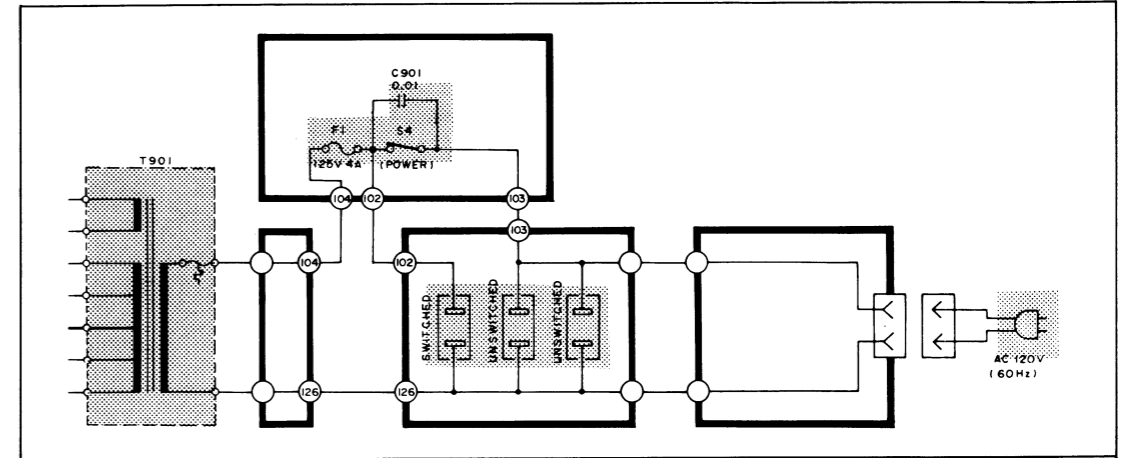
SCHEMATIC DIAGRAM

Important safety notice:

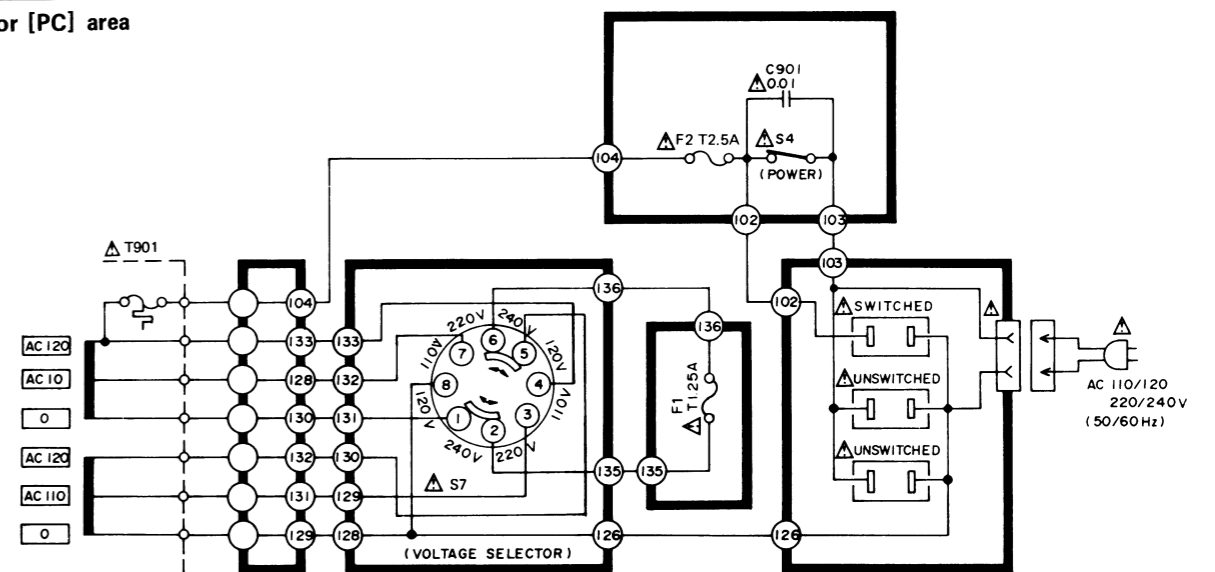
Components identified by Δ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.

- Change in power supply circuit

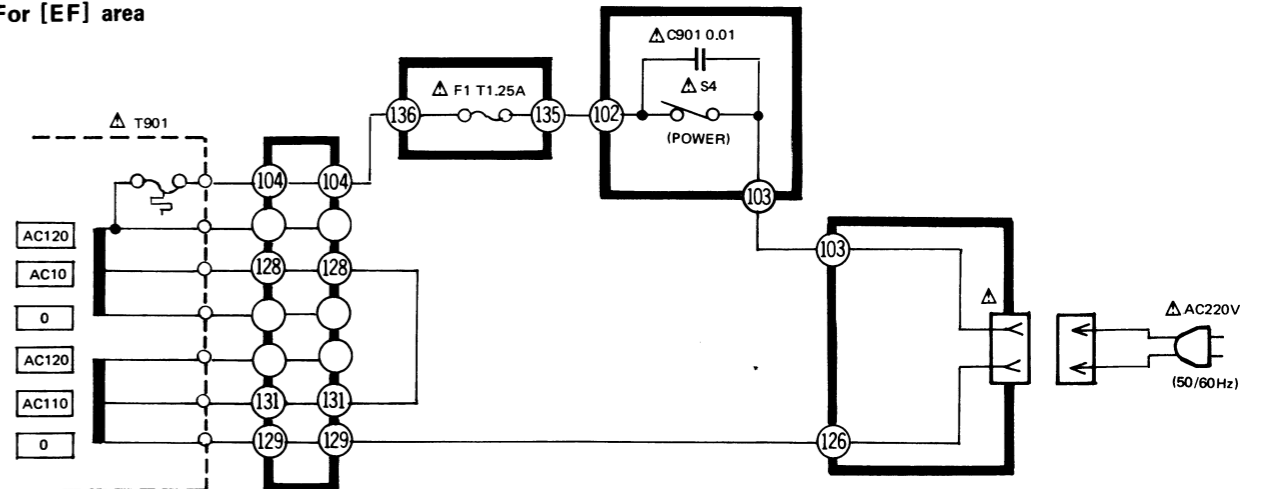
For [M] area



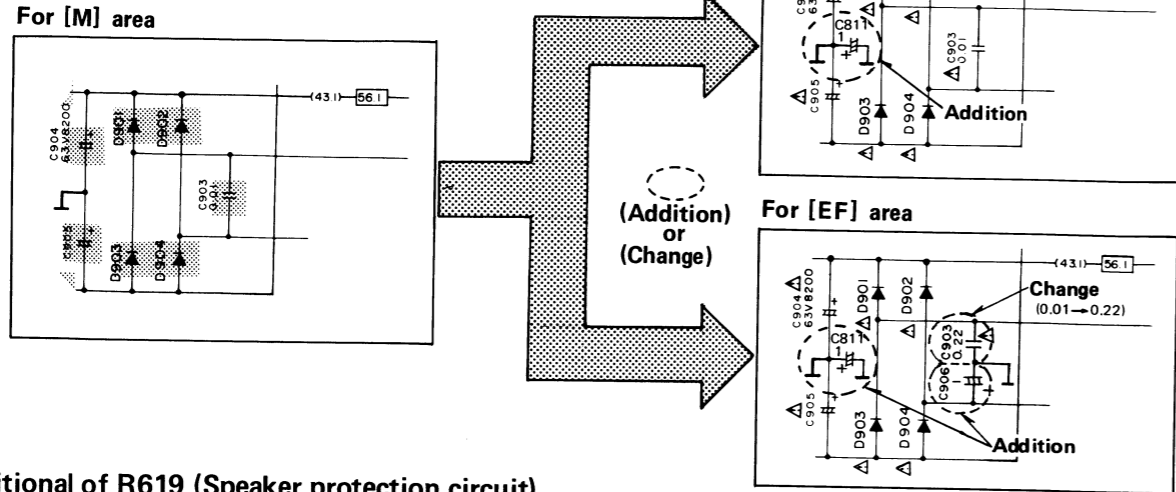
For [PC] area



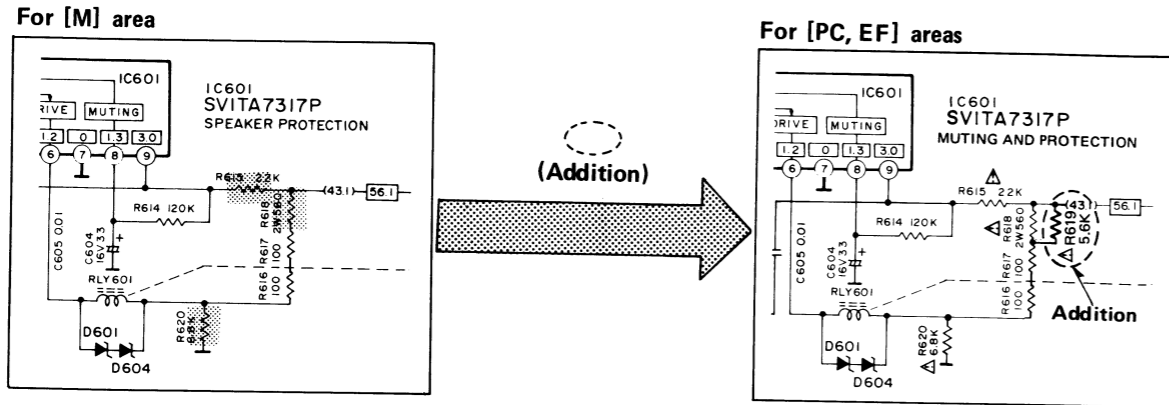
For [EF] area



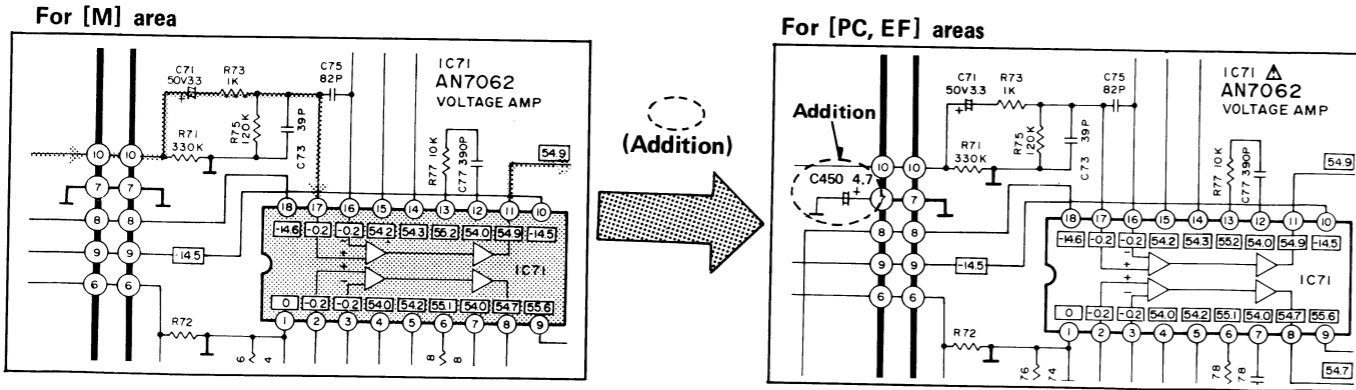
• Additional of C811 or C906 (power supply circuit)



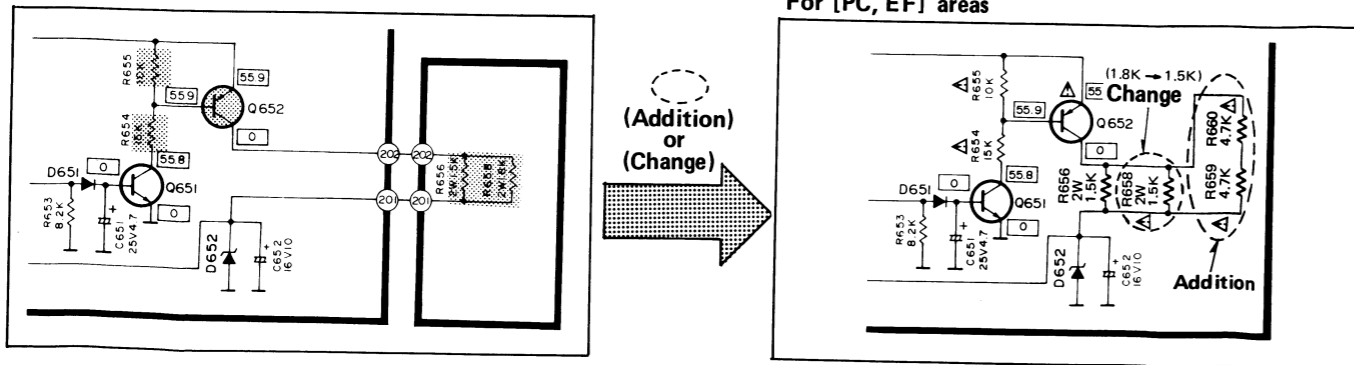
• Additional of R619 (Speaker protection circuit)



• Additional of C450 (voltage amp. circuit)



• Additional of R659, R660 (Fan motor drive circuit)



REPLACEMENT PARTS LIST

Notes:

1. Part numbers are indicated on most mechanical parts. Please use this part number for parts order.
2. Important safety notice: Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. \otimes - marked parts are used for black only, while \circ - marked parts are for silver type only.
4. Part other than \otimes - and \circ - marked are used for both black and silver type.
5. Bracketed indications in Ref. No. columns specify the area. Parts without these indications can be used for all areas.
6. The " $\text{\textcircled{S}}$ " mark is service standard parts and may differ from production parts.
7. The parenthesized numbers in the column of description stand for the quantity per set.

Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description
INTEGRATED CIRCUITS			CABINET and CHASSIS PARTS			SCREWS		
IC1	SVINJM2043DD	Equalizer	4	SXB2	Knob, Ass'y (3)	N1	XTB3+8GFZ	Tapping, $\text{\textcircled{+}}3\times 8$ (3)
IC71	AN7062	Voltage Amp.	5	SHR5276	Spacer (1)	N2	XTB3+8G	Tapping, $\text{\textcircled{+}}3\times 8$ (3)
IC201	SVINJM4560DX	Tone Amp.	6	SBC662C	Button(Tape/ext)	N3	XTB4+10F	Tapping, $\text{\textcircled{+}}4\times 10(4)$
IC401	SVI2004A	Power Amp. (2CH)	7	SBC662F	Button (1)	N4	\circ SNE2095-4	Tapping (2)
IC601	SVITA7317P	Speaker Protection	8	SBC662G	Button(Tuner) (1)	N4	\otimes SNE2095-5	Tapping (2)
TRANSISTRS			9	SBC662H	Button(Phone) (1)	N5	XTBS3+8BFZ1	Tapping with Detent, $\text{\textcircled{+}}3\times 8$ (9)
Q71.72	2SA1123-R	Pre Drive	10	\circ SGW8250S96A1	Front Panel (1)	N6	XTW3+8H	Tapping, $\text{\textcircled{+}}3\times 8$ (4)
Q601	2SA1015-Y	Hold	10	\otimes SGW8250K99A1	Front Panel (1)	N7	XTW3+8L	Tapping, $\text{\textcircled{+}}3\times 8$ (3)
Q602	2SC1815-Y	Hold	11	SUB199	Connection Rod, (4)	N8	XTB3+16BFN	Tapping, $\text{\textcircled{+}}3\times 16(2)$
Q651.801	2SC1845-E	Voltage Det., Power ON-OFF Det.	12	SUS766	Input Selector Spring (1)	N9	XTBS3+8BFYR1	Tapping with Detent, $\text{\textcircled{+}}3\times 8$ (4)
Q652	2SA992	Motor Drive	13	SBC571-4T	Button, Loudness (1)	N10	XSN3+6S	$\text{\textcircled{+}}3\times 6$ (2)
Q802	2SB941-P	Current Stabilizer	14	SGXUZ650-KM	Case (1)	N11	XTB3+10BFZ	Tapping, $\text{\textcircled{+}}3\times 10(4)$
DIODES			ACCESSORIES					
D401.402	MA182	Switching	15	SBDUZ600-KM	Knob, Volume Ornament, (1)	A1 [PC]	Δ SJA168	AC Cord (1)
D601.604	MA4110	IV, Zener	16	\circ SGXUZ600-SE1	Volume Knob Ornament, (1)	A1 [EF]	Δ SJA171	AC Cord (1)
D602.651	MA165	Switching	16	\otimes SGXUZ600-KM1	Volume Knob Ornament, (1)	A2 [PC]	SQF12222	Instruction Book (1)
D603	MA167	Switching	17	SGU420-6	Transparent Cover (1)	A2 [EF]	SQF12223	Instruction Book (1)
D652	MA4082	8.2v, Zener	18	SMP378	Holder, L.E.D (1)	A3[PC] only	Δ SJP9215	Plug Adaptor (1)
D701.702	MA2150B	15V, Zener	19	SMZ317-1	Reflector Plate (1)	PACKING PARTS		
D801	MA4180M	18V, Zener	20	SBC315-4T	Button, (2)	P1	SPP735	Polyethylene Bag (1)
D802.803.804	LN240CP	L.E.D. Input Selector Ind. (1)	21	SJJ63B	Speaker Selector Jack, Headphones (1)	P2	SPS4089-1	Pad, Left Side (1)
D805	LN440CPMS	L.E.D. Tape Monitor Ind. Rectifier	22 [PC]	SKUUZ650-SQ	Bottom Board (1)	P3	SPS4091-1	Pad, Right Side (1)
COIL and TRANSFORMER			22 [EF]	SKUUZ650-SF	Bottom Board (1)	P4	SPS3987	Pad, Upper (1)
L401.402	SLQY07G-30	choke Coil	23	SJF3059-1N	Terminal Board (1)	P5 [PC]	SPG5072	Carton Box (1)
T901	SLT5U51	Power Transformer	24	SJF4815-1	Terminal Board (1)	P5 [EF]	SPG5073	Carton Box (1)
VARIABLE RESISTORS			25	SMN1923	Bracket (1)	P6	\otimes SGK1413	Label (Black) (1)
VR201	EWAQA8X05B54	Volume, 50k Ω (B)	26 [PC] only	Δ SJS9328B	Socket, AC Out let (1)			
VR202	EWAPF7X15G15	Balance, 100k Ω (G)	27	Δ SJS9231B	Socket, AC Inlet (1)			
VR301.302	EWAPA9X15C15	Tone Control, 100 k Ω (C)	28	SMX844-1	Insulation Cover (1)			
THERMISTERS			29	\circ SKC1550S1	Cabinet (1)			
TH201.202	RRT104	100k Ω	29	\otimes SKC1550BB1	Cabinet (1)			
LAMP			30	Δ SJS9231A	Socket Cover, AC Inlet (1)			
PL801	Δ XAMS6Q8C	Power Ind.	31 [PC] only	Δ SJS9328A	Socket Cover, AC Outlet (1)			
RELAY			32	SUS271	Spring (1)			
RLY601	Δ SSS126	Speaker Protection	33	SHE174	Fan (1)			
FUSES			34	SDX323	Spacer (1)			
F1	Δ XBA2C12TRO	250V, T1.25A	35	SMEUZ600-KM	Cover, Motor Fan (1)			
F2[PC] only	Δ XBA2C25TRO	250V, T2.5A	36	MMN6C2RKMS	Motor (1)			
SWITCHES			37	SME97-1	Cover, Motor (1)			
S1	SSH3074	Input Selector	38 [PC]	SGP6261-4A	Rear Panel (1)			
S2	SSH1166	Tape Monitor	38 [EF]	SGP6251-5A	Rear Panel (1)			
S3	SSH1139	Loudness	39	SJT3213	Post (2Pin) (1)			
S4	Δ SSH1071	Power Source	40	SJS5215	Socket (2pin) (1)			
S5	SSH2065	Speaker Selector	41	SJT783	Terminal (2)			
S6	Δ SSS154	Impedance Selector	42	SJS5327	Socket (1)			
S7[PC] only	Δ ESE37219	Voltage selector	42	SJS5519	Socket (1)			
CABINET and CHASSIS PARTS			43	SJT347	Holder, Fuse (2)			
1	SBC666	Button, Power Switch (1)						
2	\circ SGU419	Transparent Cover (1)						
2	\otimes SGU419-2	Transparent Cover (1)						
3	\circ SGX7693	Ornament (1)						
3	\otimes SGX7693-1	Ornament (1)						

Area

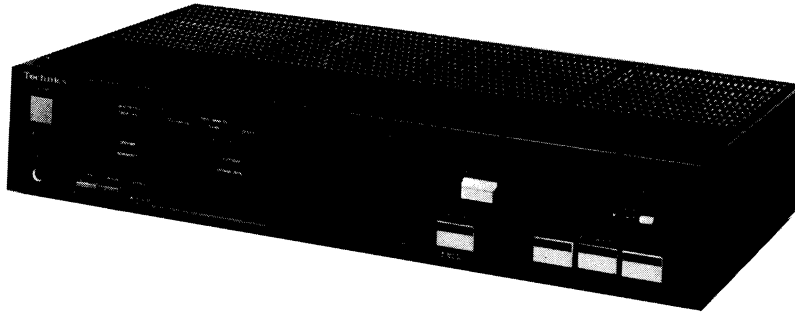
[PC] European Audio Club

[EF] France

Service Manual

New Class A
Stereo Integrated Amplifier

Amplifier
SU-Z600



Color

(K) . . . Black Type

Color	Area
(K)	[M] . . . U.S.A.
(K)	[MC] . . Canada

System

SC-7010

SC-7020E

SPECIFICATIONS

■ AMPLIFIER SECTION

Rated minimum sine wave RMS power output

20Hz ~ 20kHz both channels driven

0.02% total harmonic distortion

70W per channel (8 ohms)

1 kHz continuous power output

both channels driven

0.02% total harmonic distortion

72W per channel (8 ohms)

Dynamic headroom

2 dB (8 ohms)

Total harmonic distortion

half power at 1 kHz

0.005% (8 ohms)

SMPTE intermodulation distortion

0.02% (8 ohms)

Frequency response

PHONO

RIAA standard curve ± 0.8 dB

TUNER, CD/VIDEO/AUX, TAPE/EXT.

10 Hz~80 kHz, -3 dB

Input sensitivity

PHONO

0.3 mV (2.5 mV, IHF '66)

TUNER, CD/VIDEO/AUX, TAPE/EXT.

17 mV (150 mV, IHF '66)

S/N (IHF, A)

PHONO

76 dB (82 dB, IHF '66)

TUNER, CD/VIDEO/AUX, TAPE/EXT.

80 dB (97 dB, IHF '66)

Maximum input voltage

PHONO

140 mV (150 mV, 1 kHz)

Input impedance

PHONO

47 kilohms

TUNER, CD/VIDEO/AUX, TAPE/EXT.

22 kilohms

Tone controls

BASS

50 Hz, +10 dB ~ -10 dB

TREBLE

20 kHz, +10 dB ~ -10 dB

Loudness control (volume at -30 dB)

50 Hz, +9 dB

Output voltage

REC OUT

150 mV

Low frequency damping factor

60 (8 ohms)

Load impedance

MAIN or REMOTE

4~16 ohms

MAIN and REMOTE

8~16 ohms

■ GENERAL

Power consumption

280W, 347 VA

Power supply

AC 120V, 60 Hz

Dimension (W x H x D)

430 x 86 x 240 mm

(16-15/16" x 3-3/8" x 9-7/16")

Weight

5.8 kg (12.9 lb.)

Note:

Total harmonic distortion is measured by the digital spectrum analyzer (H.P. 3045 system).

Specifications are subject to change without notice for further improvement.

Weight and dimensions shown are approximate.

Technics

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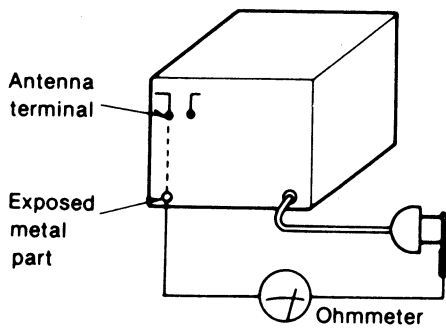
SAFETY PRECAUTION

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

INSULATION RESISTANCE TEST

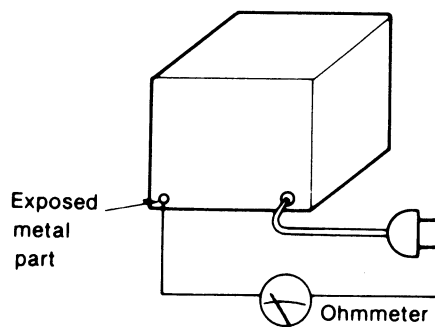
1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screwheads antenna, control shafts, handle brackets, etc. Equipment with antenna terminals should read between $3M\Omega$ and $5.2M\Omega$ to all exposed parts. (Fig. A) Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig. B)

Note: Some exposed parts may be isolated from the chassis by design. These will read infinity.



(Fig. A)

Resistance = $3M\Omega - 5.2M\Omega$



(Fig. B)

Resistance = Approx ∞

4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and rechecked before it is returned to the customer.

SELECTING THE CORRECT SPEAKER IMPEDANCE

1. When one pair of speaker systems is being used, connected to the MAIN or REMOTE terminals, set the speaker impedance selector to the range, "4~6 Ω " or "8~16 Ω ", which matches the impedance of the speaker systems being used.
2. When two pairs of speaker systems are being used, connected to the MAIN and REMOTE terminals:
 - 1) If the impedance of both systems is 16 ohms, set the speaker impedance selector to "16 Ω ".
 - 2) If the impedance of both systems is 8 ohms, or one is 8 ohms and the other is 16 ohms, set the speaker impedance selector to "8 Ω ".

Note that, if 2 pairs of speaker systems are used at the same time, determine the composite impedance as described below.

$$a \ R = \frac{R_1 \times R_2}{R_1 + R_2}$$

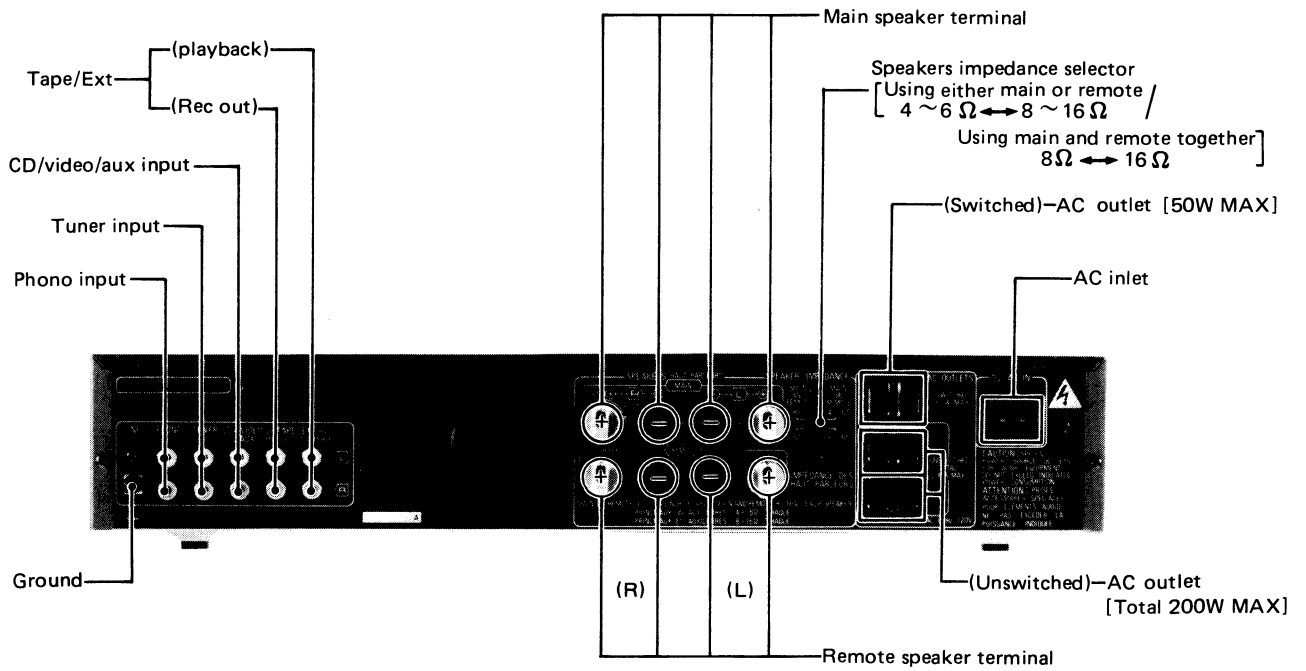
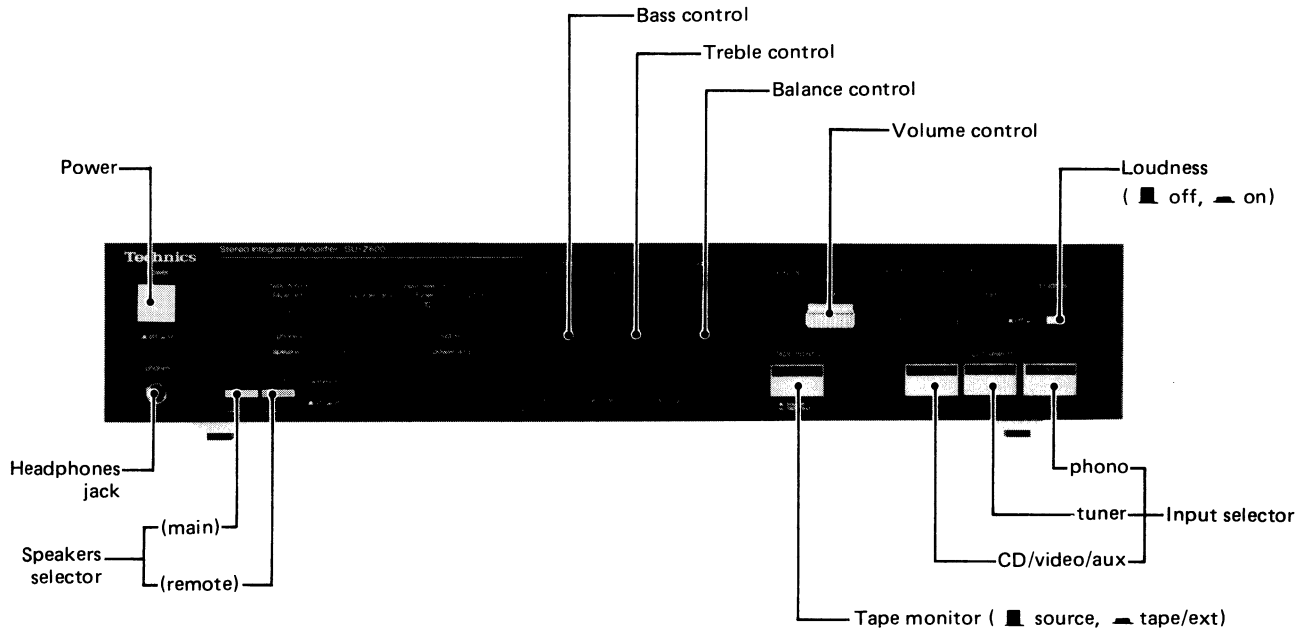
b Where:

c R = total impedance

d R_1 = impedance of speaker systems connected to "MAIN" terminals

e R_2 = impedance of speaker systems connected to "REMOTE" terminals

■ LOCATION OF CONTROLS



* Phono input capacitance is about 150pF.

PROTECTION CIRCUITRY

The protection circuitry may have operated if either of the following conditions is noticed:

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.

If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

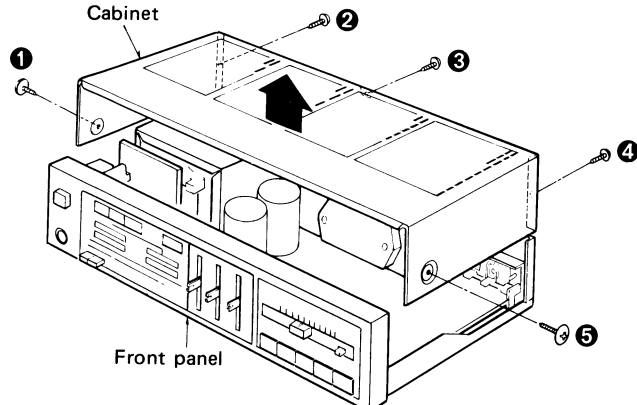
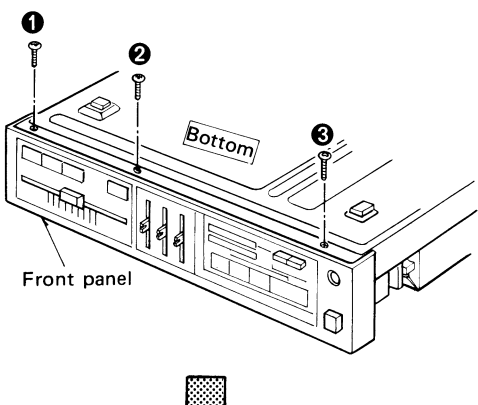
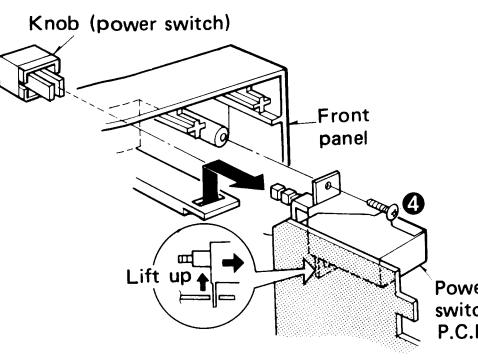
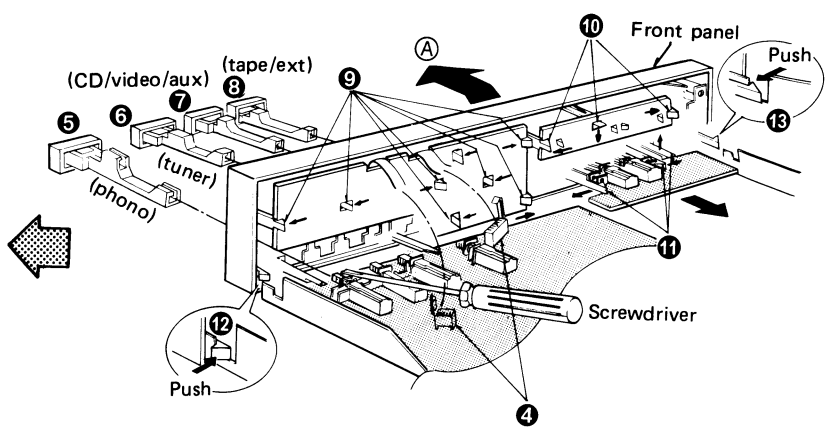
Note

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

BEFORE REPAIR AND ADJUSTMENT

1. Turn off the power supply and short-circuit of power supply capacitors (C904 and C905, 8200 μ F) at resistance (about 10 Ω , 5W) in order to discharge the charged voltage. Do not short between C904 and C905 by screwdriver. It may damage the component.
2. Before turning on the power supply after completion of repair, slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current at 120V, 60Hz in no-signal mode is 390 ~ 760mA.

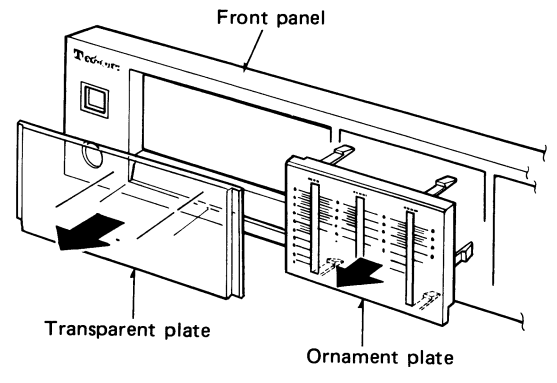
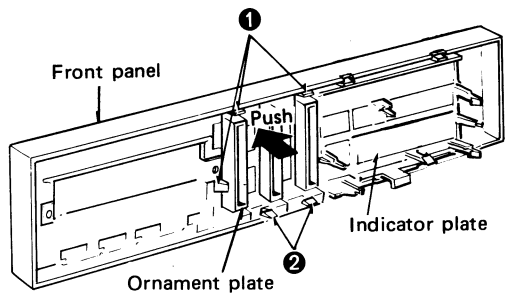
DISASSEMBLY INSTRUCTIONS

Ref. No. 1	How to remove the cabinet	Ref. No. 2	How to remove the front panel
Procedure 1	<ul style="list-style-type: none"> • Remove the 5 setscrews. (① ~ ⑤) 	Procedure 1 → 2	<ul style="list-style-type: none"> • Remove the 3 setscrews.
			
<ol style="list-style-type: none"> 1. Remove the 1 setscrew. (④) 2. Remove the power switch knob with screwdriver. 		<ol style="list-style-type: none"> 1. Pull out the 2 connectors. (④) 2. Push out the 4 knobs with screw driver. (⑤ ~ ⑧) 3. Remove the 16 claws. (⑨ ~ ⑬) 4. Remove the front panel in the direction of the arrow (A). 	

Ref. No. 3
How to remove the transparent plate

Procedure 1→2→3
● Remove the 5 claws. (① , ②)

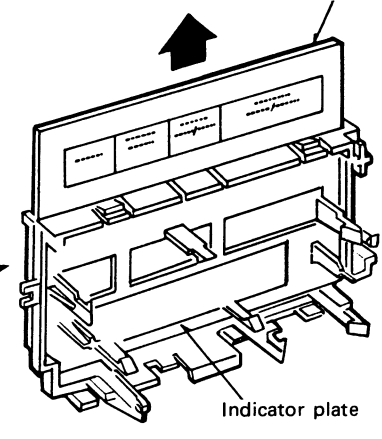
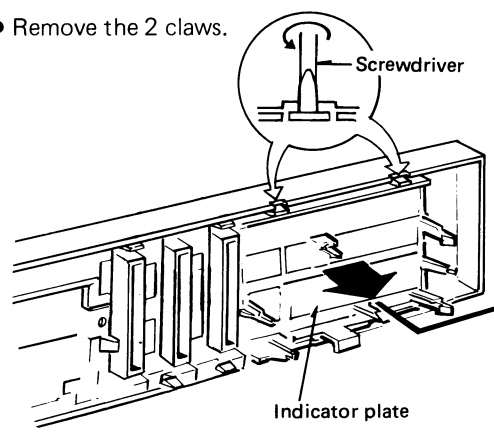
● Detach the ornament plate and transparent plate.



Ref. No. 4
How to remove the indicator transparent plate

Procedure 1→2→4
● Remove the 2 claws.

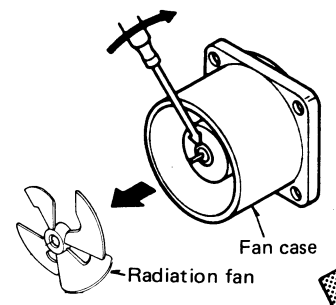
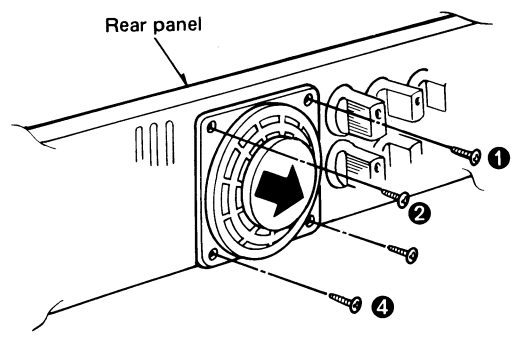
● Detach the indicator transparent plate.



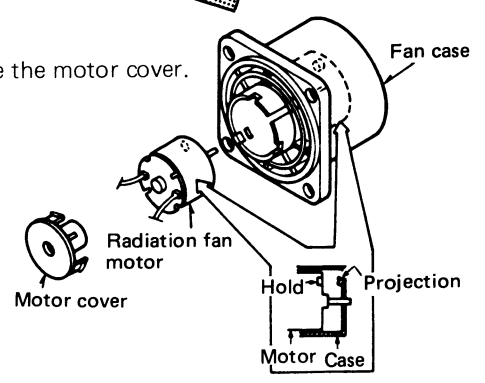
Ref. No. 5
How to remove the fan motor

Procedure 1 → 5
● Remove the 4 setscrews. (① ~ ④)

● Remove the fan by use of a screwdriver.



● Remove the motor cover.



When fitting the fan motor, match the projection of fan case with the hole in the fan motor.

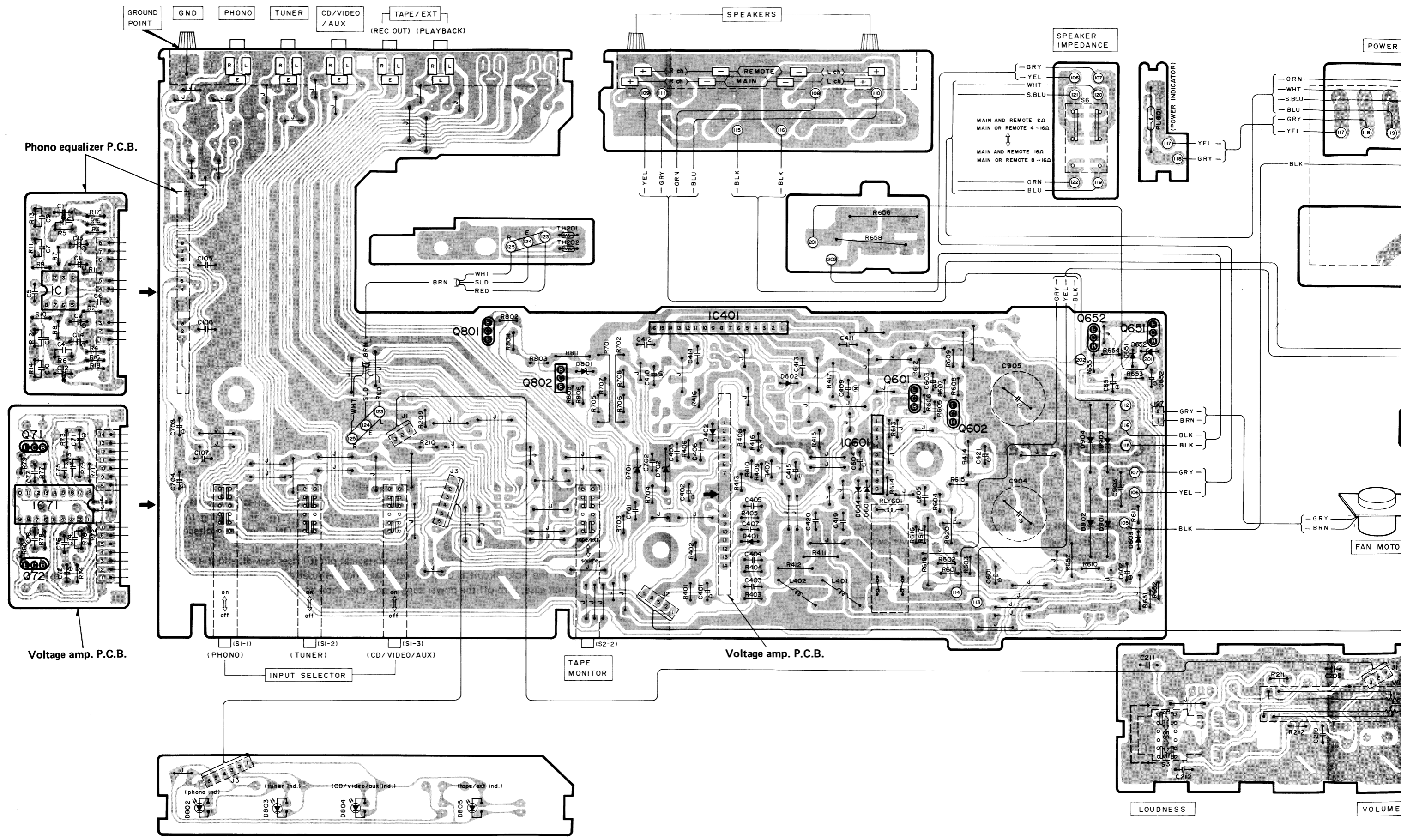
Ref. No. 6	How to remove the power IC	<ol style="list-style-type: none"> 1. Push out the 4 knobs with screwdriver. (⑤ ~ ⑧) 2. Remove the 4 setscrews. (⑨ ~ ⑫) 3. Cut off the lead clamber. 4. Shift the main P.C.B. toward the front panel in the direction of arrow (B) to remove it upward from the chassis.
Procedure 1 → 6	<ul style="list-style-type: none"> Remove the 4 setscrews. (① ~ ④) 	<ol style="list-style-type: none"> 7 (CD/video/aux) 6 (tuner) 5 (phono)

When mounting the power IC, apply silicone compound (SZZOL15) to the rear side of power IC.

■ TERMINAL GUIDE OF TRANSISTORS, DIODES AND IC'S

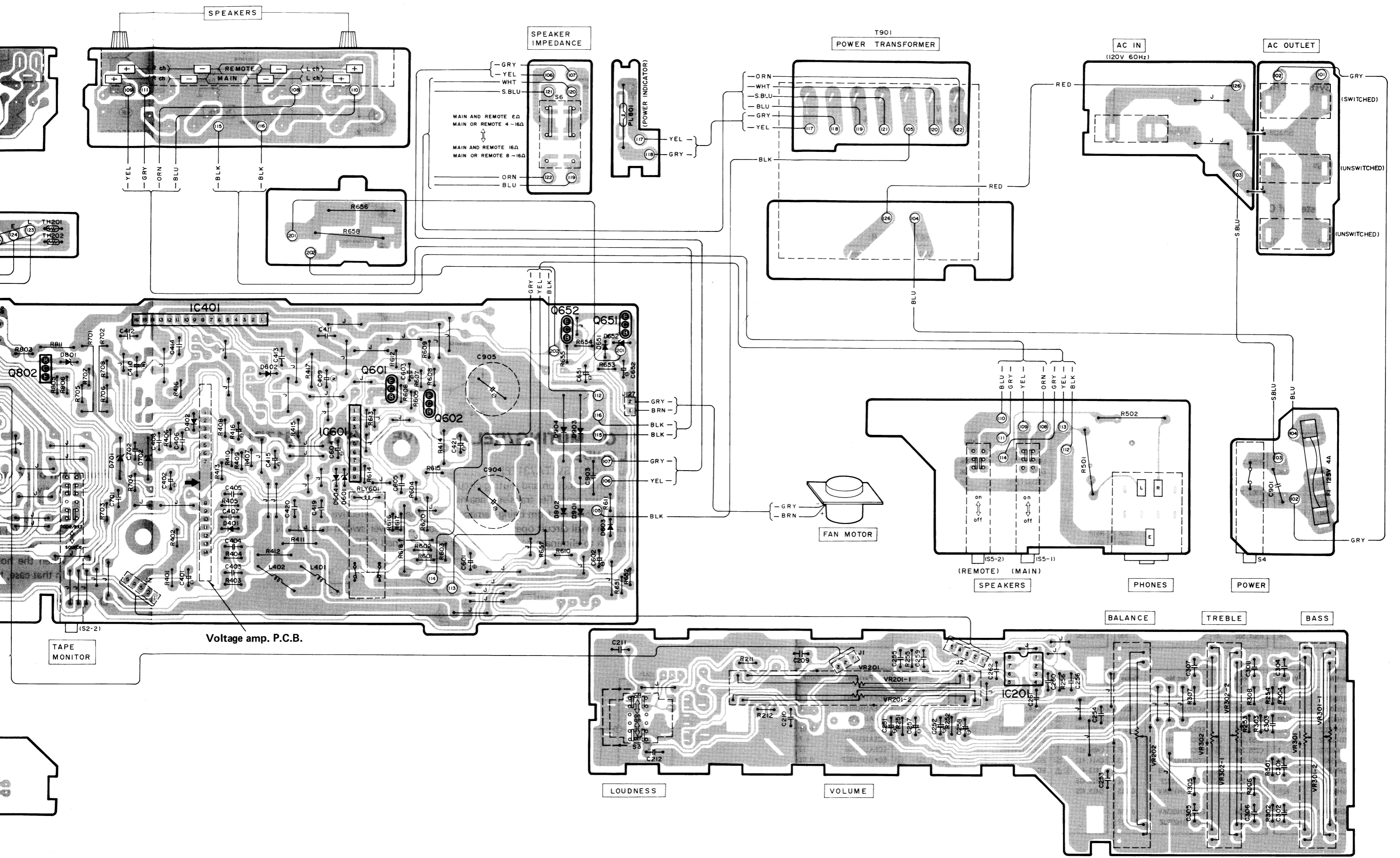
<p>AN7062 18Pin</p> <p>No. 1</p>	<p>SVINJM2043DD SVINJM4560DX</p>	<p>SVI2004A</p>	<p>SVITA7317P</p>
<p>2SA1123, 2SC1815 2SC1845, 2SA992 2SA1015</p>	<p>2SB941</p>	<p>MA4082, MA4110 MA4182</p>	<p>MA165, MA167 MA182</p>
<p>SVDS3V20</p>	<p>LN240CP, LN440CPMS</p>		

CIRCUIT BOARDS AND WIRING CONNECTION DIAGRAM



Phono equalizer P.C.B.

Voltage amp. P.C.B.



RESISTORS & CAPACITORS

Notes:
 1. Part numbers are indicated on most mechanical parts. Please use this part number for parts orders.
 2. Important safety notice: Components identified by Δ mark have special characteristics important for safety. When replacing any of these components use only manufacturer's specified parts.

3. The "S" mark is service standard parts and may differ from production parts.
 4. The unit of resistance is Ω (ohm). K = 1000 Ω , M = 1000k Ω .
 5. The unit of capacitance is μ F (microfarad). P = 10⁻⁶ μ F.

Numbering System of Resistor

Example

ERD	25	F	J	101
Type	Wattage	Shape	Tolerance	Value
ERG	2	AN	J	2R2
Type	Wattage	Shape	Tolerance	Value

Resistor Type	Wattage	Tolerance
ERD : Carbon	10 : 1/8W	J : \pm 5%
ERG : Metal Oxide	S2 : 1/4W	G : \pm 2%
ERO : Metal Film	25 : 1/4W	
	S1 : 1/2W	
	2 : 2W	

ERD10TLJ□□□ → Chip type carbon.
 ERO10MKG□□□ → Chip type metal film.

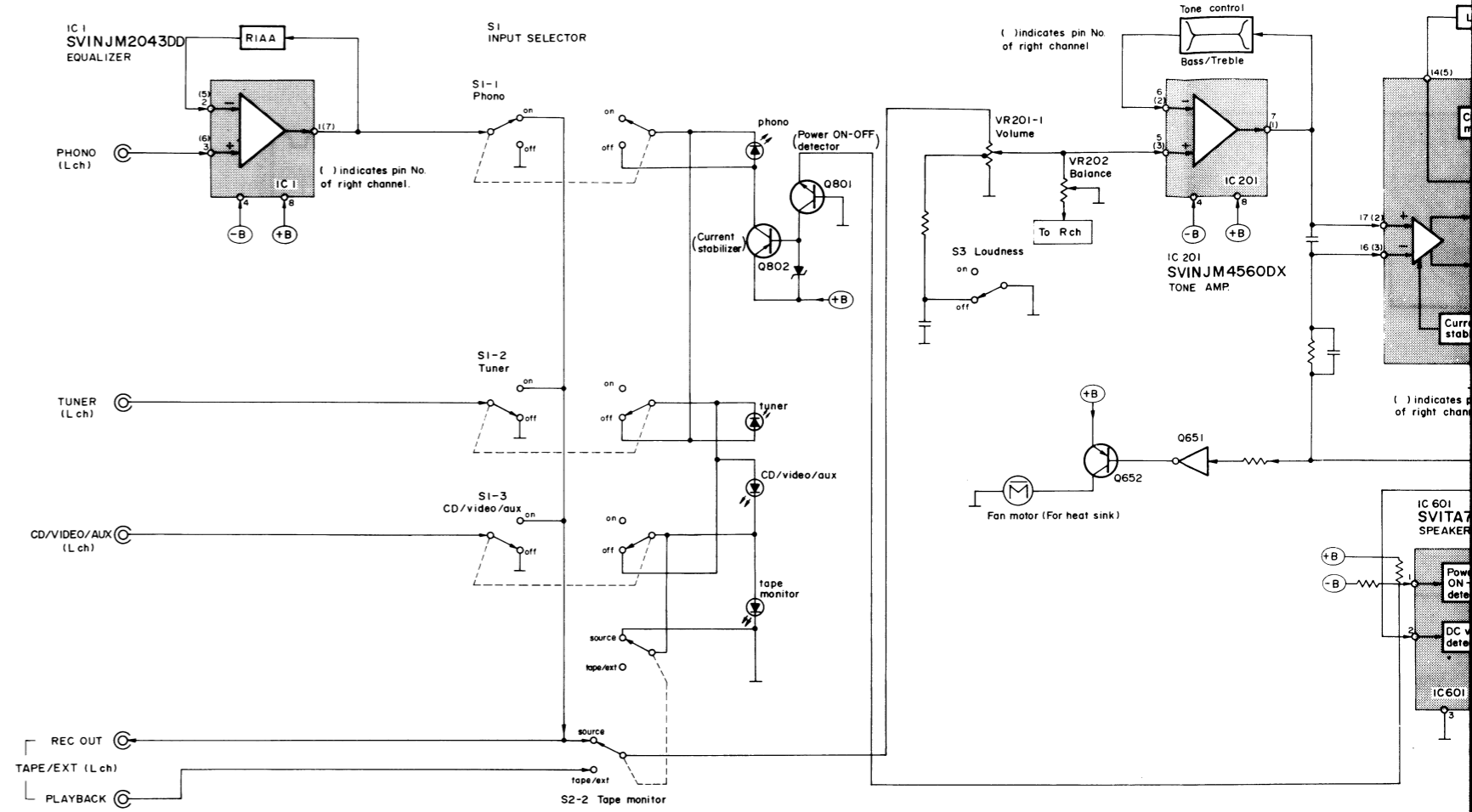
Numbering System of Capacitor

Example

ECKD	1H	103	Z	F	ECEA	50	M	R47	R
Type	Voltage	Value	Tolerance	Peculiarity	Type	Voltage	Peculiarity use	Value	Special use

Capacitor Type	Voltage		Tolerance
	ECEA Type	Others	
ECEA : Electrolytic	0J : 6.3V	1H : 50V DC	C : \pm 0.25pF
ECEA...N : Non Polar Electrolytic	1C : 16V	KC : 400V AC	K : \pm 10%
ECCD : Ceramic	1E : 25V		Z : +80%, -20%
ECKD : Ceramic	1H : 50V		P : +100%, -0%
ECQM : Polyester	4J : 42V		
ECQS : Electrolytic	1J : 63V		
	2A : 100V		

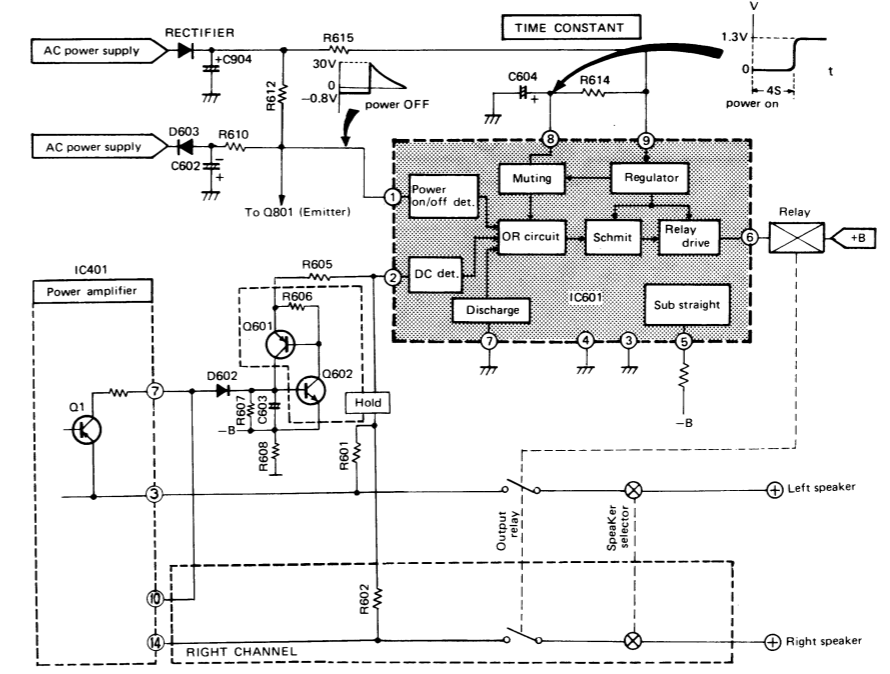
BLOCK DIAGRAM



DISCRIPTION OF MUTING/RELAY DRIVE IC (SVITA7317P) TECHNICAL GUIDE

Protection circuit (IC601 SVITA7317P) Fig. 1
 IC601 serves as both protection and muting circuits.

- Protection of power amplifier transistor against overload.
- DC protection of speakers from being damaged when the set is defective.
- Muting operation until circuit operation is stabilized after power switch turned ON.
- Muting operation to eliminate noise with power switch turned OFF.



1. Protection of power amplifier transistor against overload. (1) If excessive power is applied, the power amplifier transistors are short-circuited. (2) Q1 ON causes the voltage at pin (2) to drop. (3) As the voltage at pin (2) drops, the relay is immediately energized. NOTE: When the power switch is turned on, the voltage at pin (2) rises. In that case, the relay is immediately de-energized.

2. DC protection (1) If DC is generated at the output of the power amplifier, the DC detection circuit (IC601) detects it. (2) The DC detection circuit (IC601) drives the relay to protect the speakers.

3. Muting circuit with (1) With power turns on, the voltage at pin (2) rises. (2) When the voltage at pin (2) rises, the relay is immediately de-energized. (6) drops and the muting operation is completed. NOTE: The time required for the muting operation is approximately 45ms.

4. Muting circuit with (1) Voltages from the power amplifier (IC401) are applied to the relay (R610) of small time constant. (2) When power turns on, the voltage at pin (2) rises. (3) As the voltage at pin (2) rises, the relay is immediately de-energized.

Fig. 1

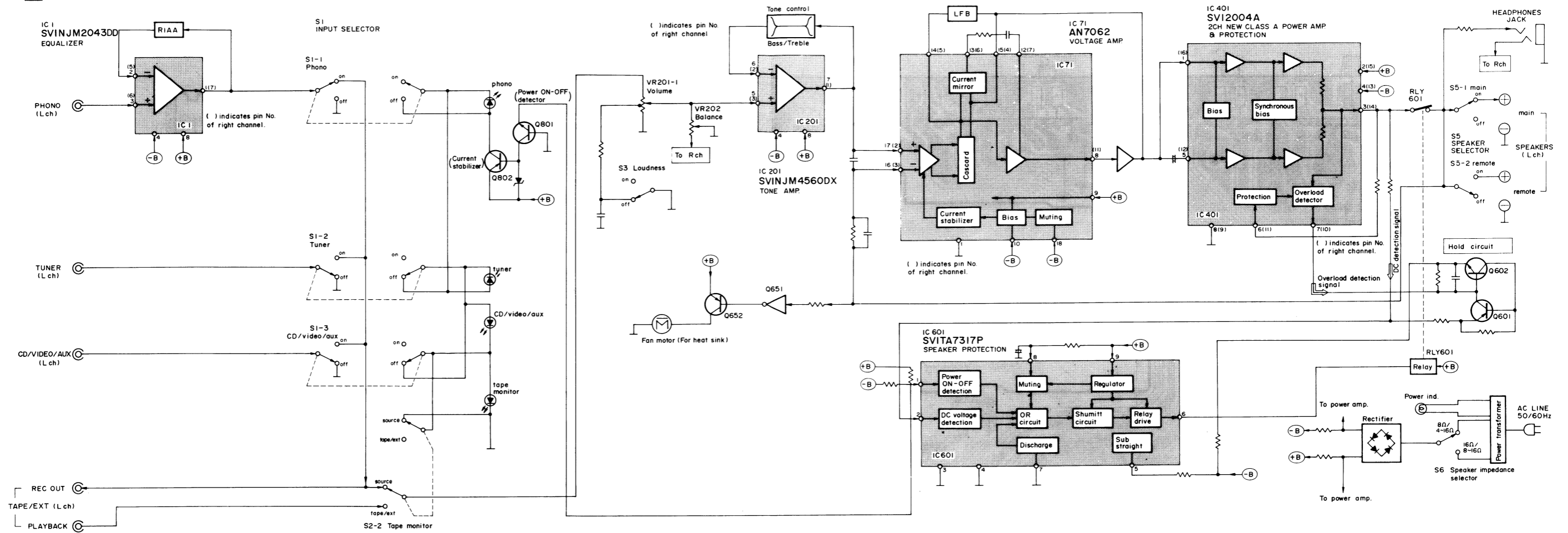
RESISTORS

Ref. No.	Part No.	Value	Ref. No.	Part No.	Value	Ref. No.	Part No.	Value	Ref. No.	Part No.	Value
R1, 2	ERD10TLJ391U	390	R253, 254	ERDS2TJ124	120K	R601, 602	ERDS2TJ124	120K	R653	ERDS2TJ822	8.2K
R3, 4	ERD10TLJ224U	220K	R255, 256	ERDS2TJ474	470K	R603	ERDS2TJ103	10K	R654	ERDS2TJ153	15K
R5, 6	ERO10MKG5622	56.2K	R301, 302	ERDS2TJ223	22K	R604	ERDS2TJ102	1K	R655	ERDS2TJ103	10K
R7, 8	ERD10TLJ271U	270	R303, 304	ERDS2TJ392	3.9K	R605	ERDS2TJ104	100K	R656	ERG2ANJ152	1.5K
R9, 10	ERD10TLJ680U	68	R305, 306	ERDS2TJ222	2.2K	R606, 607	ERDS2TJ103	10K	R657	ERD25FJ220	22
R11, 12	ERD10TLJ184U	180K	R307, 308	ERDS2TJ821	820	R608	ERDS2TJ333	33K	R658	ERG2ANJ182	1.8K
R13, 14	ERD10TLJ123U	12K	R401, 402	ERDS2TJ392	3.9K	R609	ERDS2TJ223	22K	R701, 702	ERG2ANJ821	820
R15, 16	ERD10TLJ563U	56K	R403, 404	ERDS2TJ124	120K	R610	ERDS2TJ822	8.2K	R703, 704	ERDS2TJ101	100
R17, 18	ERD10TLJ102U	1K	R405, 406	ERDS2TJ821	820	R611	ERDS2TJ333	33K	R705, 706	ERDS2TJ101	100
R71, 72	ERD10TLJ334U	330K	R407, 408	ERDS2TJ392	3.9K	R612	ERDS2TJ224	220K	R707, 708	ERDS2TJ101	100
R73, 74	ERD10TLJ102U	1K	R409, 410	ERDS2TJ392	3.9K	R613	ERDS2TJ103	10K	R802	ERDS2TJ123	12K
R75, 76	ERD10TLJ124U	120K	R411, 412	ERD25FJ100	10	R614	ERDS2TJ124	120K	R803, 804	ERDS2TJ151	150
R77, 78	ERD10TLJ103U	10K	R413	ERDS2TJ473	47K	R615	ERDS2TJ223	22K	R805, 806	ERDS2TJ151	150
R79, 80	ERD10TLJ220U	22	R414	ERD25FJ220	22	R616, 617	ERDS2TJ101	100	R811	ERD25FJ220	22
R209, 210	ERDS2TJ222	2.2K	R415, 416	ERD25FJ331	330	R618	ERG2ANJ561	560			
R211, 212	ERDS2TJ562	5.6K	R417	ERD25FJ680	68	R620	ERDS1FJ682	6.8K			
R251, 252	ERDS2TJ474	470K	R501, 502	ERG2ANJ331	330	R651, 652	ERDS2TJ223	22K			

CAPACITORS

Ref. No.	Part No.	Value	Ref. No.	Part No.	Value	Ref. No.	Part No.	Value	Ref. No.	Part No.	Value
C1, 2	ECEA1HU3R3	3.3	C107	ECKD1H103ZF	0.01	C307, 308	ECQM1H333KV	0.033	C602	ECEA1HU3R3	3.3
C3, 4	ECCD1H101K	100P	C209, 210	ECKD1H331KB	330P	C401, 402	ECEA1CU100	10	C603	ECEA1HU010	1
C5, 6	ECKD1H471KB	470P	C211, 212	ECQM1H563KV	0.056	C403, 404	ECCD1H050CC	5P	C604	ECEA1CU330	33
C7, 8	ECQM1H223JZ	0.022	C251, 252	ECEA1HU3R3	3.3	C405, 406	ECKD1H102KB	0.001	C605	ECKD1H103ZF	0.01
C9, 10	ECQM1H682JZ	0.0068	C253, 254	ECCD1H101K	100P	C407, 408	ECCD1H270K	27P	C651	ECEA1EU4R7	4.7
C11, 12	ECEA1HN010S	1	C255, 256	ECCD1H330K	33P	C409, 410	ECEA1HN010S	1	C652	ECEA1CU100	10
C13, 14	ECEA0JU330	33	C257, 258	ECEA1HU3R3	3.3	C411, 412	ECCD1H101K	100P	C701, 702	ECKD1H103ZF	0.01
C71, 72	ECEA1HU3R3	3.3	C259, 260	ECKD1H331KB	330P	C413, 414	ECCD1H101K	100P	C901	ECKDKC103PF2	0.01
C73, 74	ECCD1H390K	39P	C261, 262	ECKD1H103ZF	0.01	C415, 416	ECEA2AU100	10	C903	ECKD2H103ZF	0.01
C75, 76	ECCD1H820K	82P	C301, 302	ECQM1H153KV	0.015	C419, 420	ECQM1H223JZ	0.022	C904, 905	ECES1JV822U	8200
C77, 78	ECKD1H391KB	390P	C303, 304	ECQM1H683KV	0.068	C421	ECEA2AU100	10			
C105, 106	ECKD1H103ZF	0.01	C305, 306	ECQM1H272JZ	0.0027	C601	ECEA0JU101	100			

BLOCK DIAGRAM



may differ from
 0.0Ω , $M = 1000k\Omega$.
 $P = 10^{-6} \mu F$.

± 5%
 ± 2%

R
 Special use

Part No.	Value
ERDS2TJ822	8.2K
ERDS2TJ153	15K
ERDS2TJ103	10K
ERG2ANJ152	1.5K
ERD25FJ220	22
ERG2ANJ182	1.8K
ERG2ANJ821	820
ERDS2TJ101	100
ERDS2TJ101	100
ERDS2TJ101	100
ERDS2TJ123	12K
ERDS2TJ151	150
ERDS2TJ151	150
ERD25FJ220	22

Part No.	Value
ECEA1HU3R3	3.3
ECEA1HU010	1
ECEA1CU330	33
ECKD1H103ZF	0.01
ECEA1EU4R7	4.7
ECEA1CU100	10
ECKD1H103ZF	0.01
ECEA1EU100	10
ECKDKC103PF2	0.01
ECKD2H103ZF	0.01
ECES1JV822U	8200

DESCRIPTION OF MUTING/RELAY DRIVE IC (SVITA7317P)

TECHNICAL GUIDE

Protection circuit (IC601 SVITA7317P) Fig. 1

IC601 serves as both protection and muting circuits.

- Protection of power amplifier transistor against overload.
- DC protection of speakers from being damaged when the set is defective.
- Muting operation until circuit operation is stabilized after power switch turned ON.
- Muting operation to eliminate noise with power switch turned OFF.

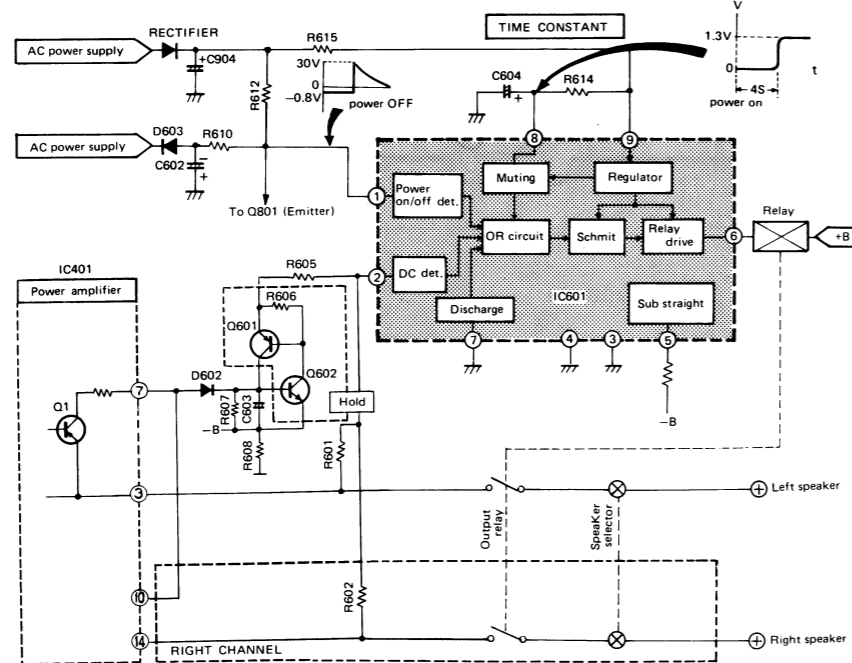


Fig. 1

1. Protection of power amplifier against overload

- (1) If excessive power is penetrated with a load less than the rating connected to speaker terminals or the speaker terminals are short-circuited, a voltage a large current flow then Q1 turns on causing the base voltage increasing of Q1.
- (2) Q1 ON causes the hold circuit of Q602 and Q601 to turn ON, then the voltage at pin (2) of IC601 rises. (The voltage at pin (2) is usually -0.8 V.)
- (3) As the voltage at pin (2) of IC601 rises, the voltage at pin (6) rises as well, and the output relay turns OFF.

NOTE: When the hold circuit is ON, the relay will not be reset even if the normal condition of the circuit is restored. In that case, turn off the power supply and turn it on again.

2. DC protection

- (1) If DC is generated at the speaker terminal due to defective circuit, then DC will be applied to IC601 pin (2).
- (2) The DC detection circuit of IC601 functions and the voltage at pin (6) rises, then the output relay turns OFF.

3. Muting circuit with power ON

- (1) With power turns ON, positive (+) voltage supply to C604 through R615 and R614.
- (2) When the voltage across C604 (i.e. voltage at IC601 pin (8)) gradually rises up to about 1.3 V, the voltage at pin (6) drops and then the output relay turns ON.

NOTE: The time required for voltage rise at pin (8) depends upon the time constant of R614 and C604.

4. Muting circuit with power OFF

- (1) Voltages from power supply circuit (C904, R612) of large time constant and from power supply circuit (C602, R610) of small time constant are applied to pin (1) of IC601, which is usually about -0.5V.
- (2) When power turns OFF, the negative (-) voltage of small time constant lowers, but the positive (+) voltage of large time constant will not immediately drop. Accordingly, the voltage at IC601 pin (1) rises.
- (3) As the voltage at pin (1) rises, the voltage at pin (6) rises as well, causing the output relay to turn OFF.

*Relay is immediately turned OFF with power OFF, therefore there is no circuit noise trouble due to voltage drop.

SCHEMATIC DIAGRAM

(This schematic diagram may be modified at any time with the development of new technology.)

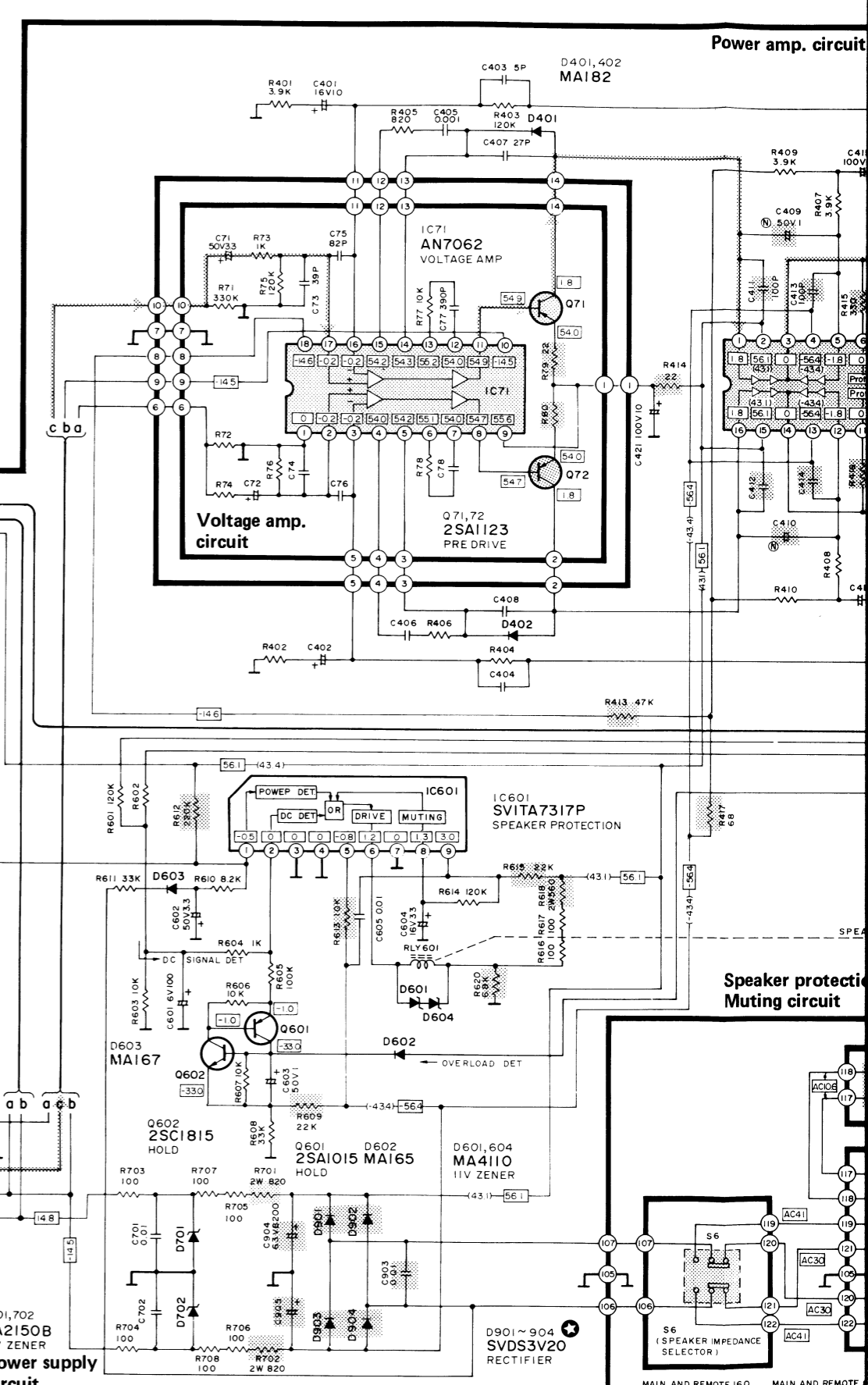
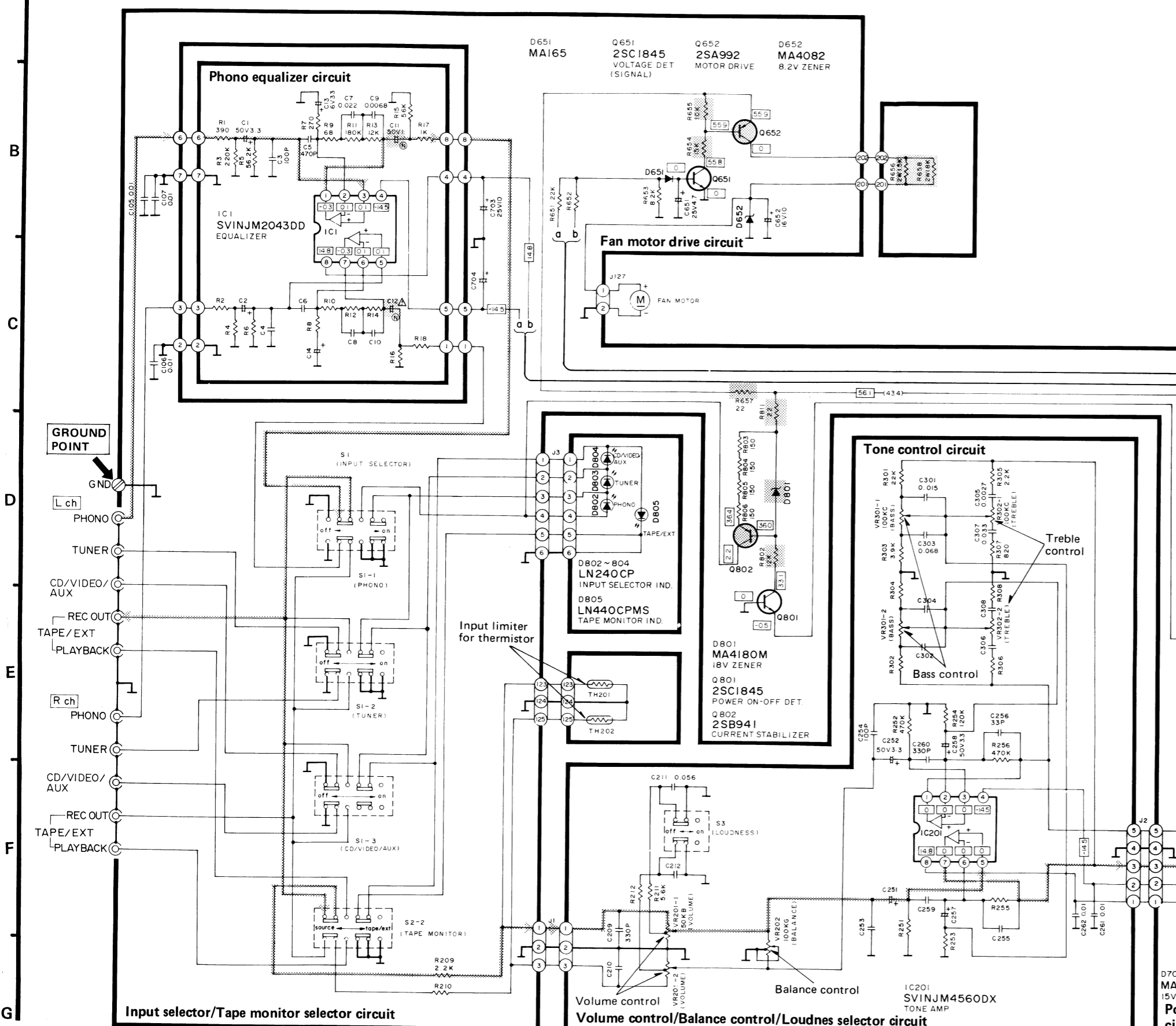
The part No. of transistors, IC and diodes mentioned in the schematic diagram stand for production part No. Regarding the part No. with a circled mark, the production part No. are different from the replacement part No. Therefore, when placing an order for replacement parts, please use the part No. in the replacement parts list.

Notes:

- S1-1 ~ S1-3 : Input selector switch in "phono" position.
(S1-1: phono S1-2: tuner S1-3: DC/video/aux)
- S2-2 : Tape monitor switch in "source" position.
(source, tape/ext)

- S3 : Loudness switch in "off" position.
(off, on)
- S4 : Power source switch in "on" position.
(off, on)
- S5-1 : Main speaker selector switch in "on" position.
(off, on)

- S5-2 : Remote speaker selector switch in "off" position.
(off, on)
- S6 : Speaker impedance selector switch in "16Ω" position.
(main and remote/main and remote 8Ω / 4Ω)



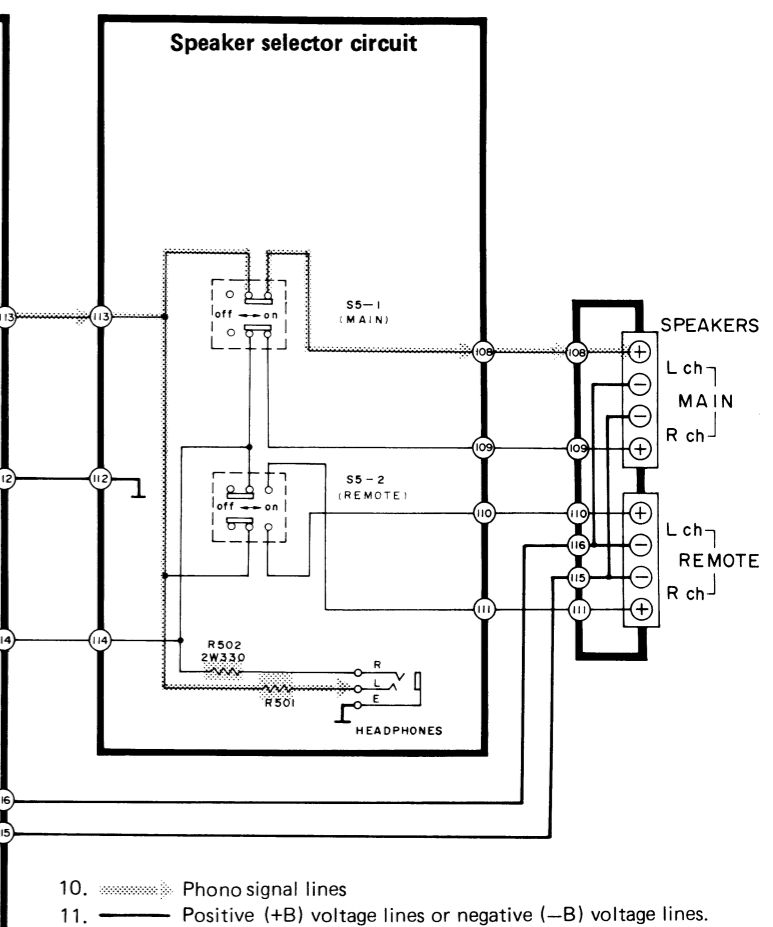
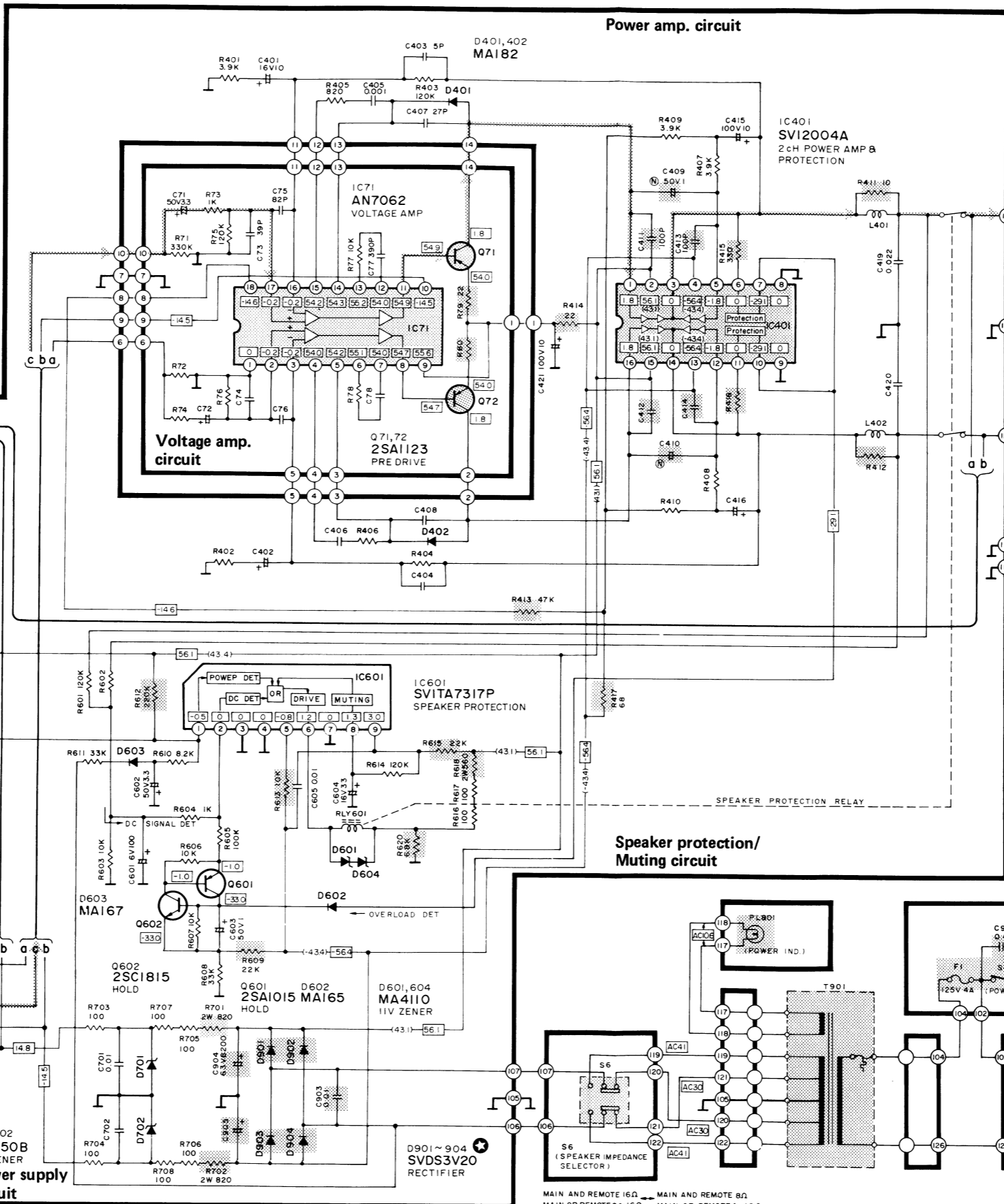
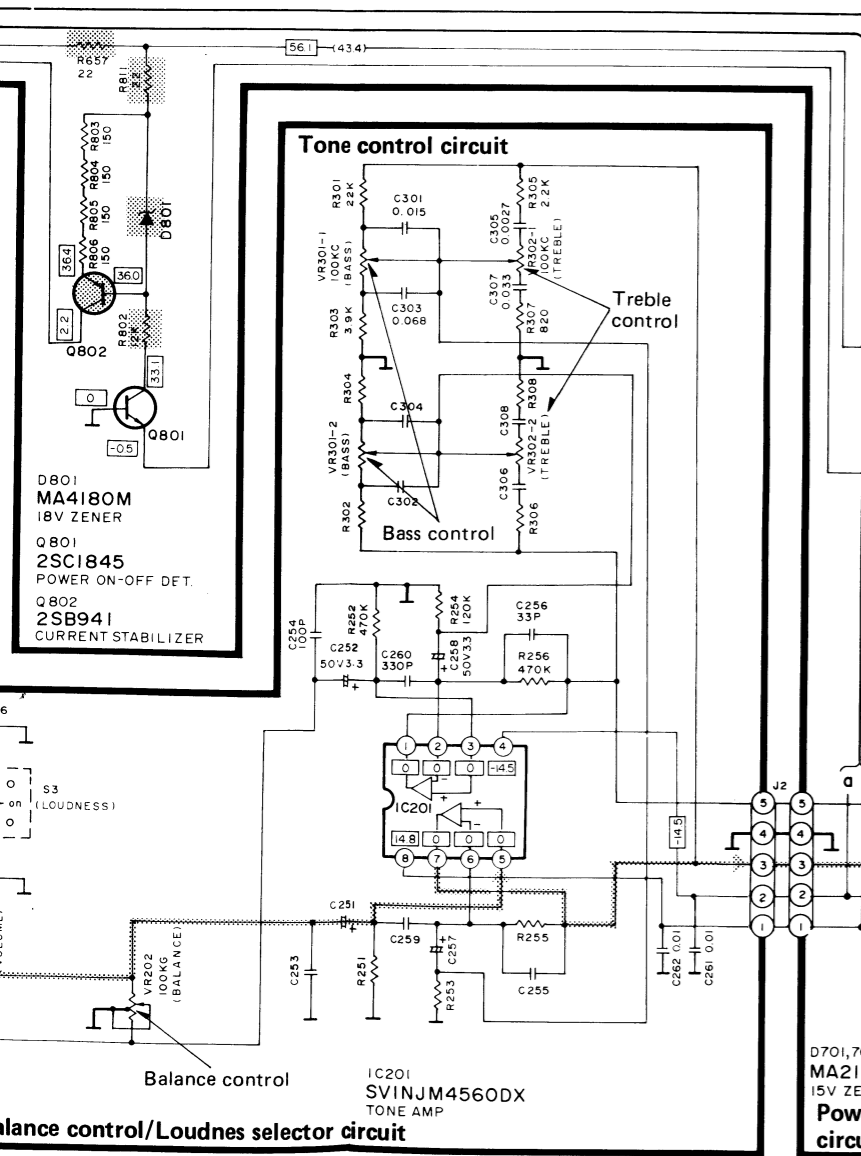
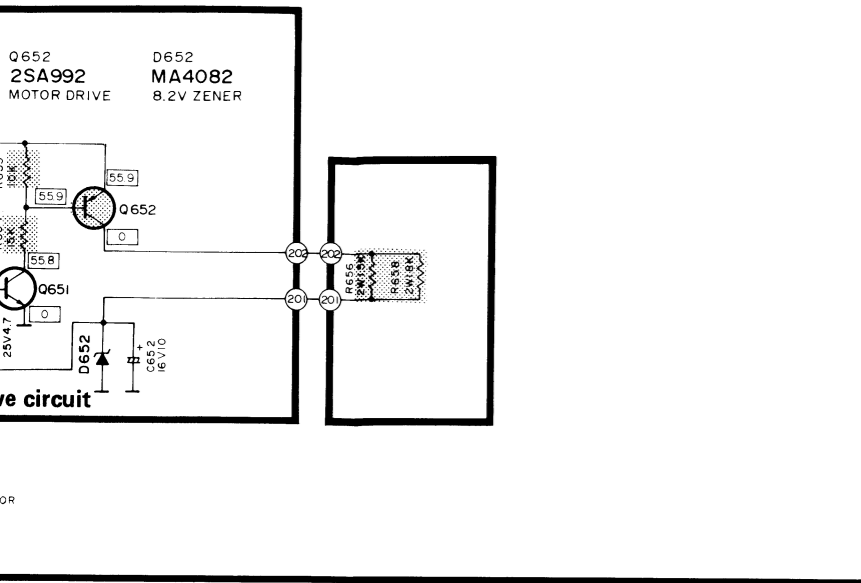
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- Notes:
- S1-1 ~ S1-3 : Input selector switch in "phono" position.
(S1-1: phono S1-2: tuner S1-3: DC/video/
aux)
 - S2-2 : Tape monitor switch in "source" position.
(■ source , ▲ tape/ext)

- S3 : Loudness switch in "off" position.
(■ off , ▲ on)
- S4 : Power source switch in "on" position.
(■ off , ▲ on)
- S5-1 : Main speaker selector switch in "on" position.
(■ off , ▲ on)

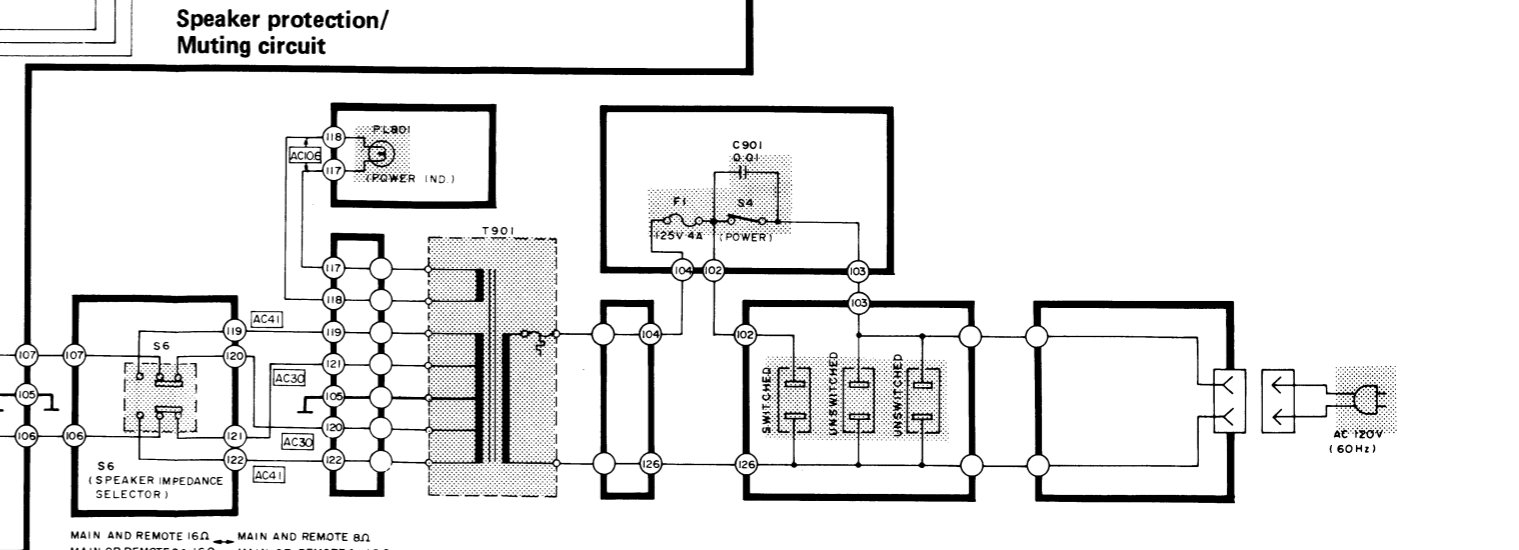
- S5-2 : Remote speaker selector switch in "on" position.
(■ off , ▲ on)
- S6 : Speaker impedance selector switch in "8Ω/4 ~
16Ω" position.
(main and remote/main or remote main and remote/main or remote)
8Ω / 4 ~ 16Ω → 16Ω / 8 ~ 16Ω

- indicated voltage values are the standard values for the DC electronic circuit tester (high impedance) with the ground point taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester. [high tap → 16Ω/8 ~ 16Ω]
- Figures in () stand for DC voltage in low tap. [8Ω/4 ~ 16Ω]



IMPORTANT SAFETY NOTICE
The shaded area on this schematic diagram incorporates special features important for protection from fire and electrical shock hazards. When servicing it is essential that only manufacturer's specified parts be used for the critical components in the shaded areas of the schematic.

- Phono signal lines
- Positive (+B) voltage lines or negative (-B) voltage lines.



REPLACEMENT PARTS LIST

Notes:

1. Part numbers are indicated on most mechanical parts. Please use this part number for parts order.
2. Important safety notice: Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Bracketed indications in Ref. No. columns specify the area. Parts without these indications can be used for all areas.
4. The "S" mark is service standard parts and may differ from production parts.
5. The parenthesized numbers in the column of description stand for the quantity per set.

Areas

- * [M] is available in the U.S.A.
- * [MC] is available in Canada.

Ref. No.	Part No.	Part Name & Description
INTEGRATED CIRCUITS		
IC1	SVINJM2043DD	Equalizer
IC71	Δ AN7062	Voltage Amp.
IC201	SVINJM4560DX	Tone Amp.
IC401	Δ SVI2004A	Power Amp. (2CH)
IC601	SVITA7317P	Speaker Protection
TRANSISTERS		
Q71, 72	Δ 2SA1123-R	Pre Drive
Q601	2SA1015-Y	Hold
Q602	2SC1815-Y	Hold
Q651, 801	2SC1845-E	Voltage Det., Power ON-OFF Det.
Q652	Δ 2SA992	Motor Drive
Q802	Δ 2SB941-P	Current Stabilizer
DIODES		
D401, 402	MA182	Switching
D601, 604	MA4110	IIV, Zener
D602, 651	MA165	Switching
D603	MA167	Switching
D652	MA4082	8.2v, Zener
D701, 702	MA2150B	15V, Zener
D801	Δ MA4180M	18V, Zener
D802, 803, 804	LN240CP	L.E.D. Input Selector Ind.
D805	LN440CPMS	L.E.D. Tape Monitor Ind.
D901~904	Δ SVDS3V40	Rectifier
COIL and TRANSFORMER		
L401, 402	SLQY07G-30	choke Coil
T901	Δ SLT5U49	Power Transformer
VARIABLE RESISTORS		
VR201	EWAQA8X05B54	Volume, 50k Ω (B)
VR202	EWAPF7X15G15	Balance, 100k Ω (G)
VR301, 302	EWAPA9X15C15	Tone Control, 100k Ω (C)
THERMISTERS		
TH201, 202	RRT104	
LAMP		
PL801	Δ XAMS6Q8C	Power Ind.
RELAY		
RLY601	Δ SSY126	Speaker Protection
FUSE		
F1	Δ XBA1F40NU14	125V, 4A
SWITCHES		
S1	SSH3074	Input Selector
S2	SSH1166	Tape Monitor
S3	SSH1139	Loudness
S4	Δ SSH1071	Power Source
S5	SSH2065	Speaker Selector
S6	Δ ESD3911T	Impedance Selector
CABINET and CHASSIS PARTS		
1	SBC666	Button, Power Switch (1)
2	SGU419-2	Transparent Cover (1)
3	SGX7693-1	Ornament (1)

Ref. No.	Part No.	Part Name & Description
CABINET and CHASSIS PARTS		
4	SXB2	Knob, Ass'y (3) (Tone, Balance)
5	SHR5276	Spacer (1)
6	SBC662C	Button(Tape/ext) (1)
7	SBC662F	Button (CD/video/aux) (1)
8	SBC662G	Button(Tuner) (1)
9	SBC662H	Button(Phono) (1)
10	SGW8250BB	Front Panel (1)
11	SUB199	Connection Rod, (4) Input Selector
12	SUS766	Spring (1)
13	SBC571-4T	Button, Loudness (1)
14	SGXUZ600-KM	Case (1)
15	SBDUZ600-KM	Knob, Volume (1)
16	SGXUZ600-KM1	Ornament, Volume Knob (1)
17	SGU420	Transparent Cover (1)
18	SMP378	Holder, L.E.D (1)
19	SMZ317-1	Reflector Plate (1)
20	SBC315-4T	Button, Speaker Selector (2)
21	SJJ63B	Jack, Headphones (1)
22 (M)	SKUUZ600-KM	Bottom Board (1)
22 (MC)	SKUUZ600-KC	Bottom Board (1)
[22-1]	SKL293	Foot (4)
23	SJF3059-1N	Terminal Board (1)
24	SJF4815-1	Terminal Board (1)
25	SMN1923	Bracket (1)
26 (M)	Δ SJS9328B	Socket, AC Out let (1)
26 (MC)	Δ SJS9329B	Socket, AC Out let (1)
27 (M)	Δ SJS9231B	Socket, AC Inlet (1)
27 (MC)	Δ SJS9234B	Socket, AC Inlet (1)
28	SMX844-1	Insulation Cover (1)
29	SKC1550BB1	Cabinet (1)
30 (M)	Δ SJS9231A	Socket Cover, AC Inlet (1)
30 (MC)	Δ SJS9234A	Socket Cover, AC Inlet (1)
31 (M)	Δ SJS9328A	Socket Cover, AC Outlet (1)
31 (MC)	Δ SJS9329A	Socket Cover, AC Outlet (1)
32	SUS271	Spring (1)
33	SHE174	Fan (1)
34	SDX323	Spacer (1)
35	SMEUZ600-KM	Cover, Motor Fan (1)
36	MMN6C2RKMS	Motor (1)
37	SME97	Cover, Motor (1)
38	SGP6261-2A	Rear Panel (1)
39	SJT3213	Post (2Pin) (1)
40	SJS5215	Socket (2pin) (1)
41	SJT783	Terminal (2)

Ref. No.	Part No.	Part Name & Description
CABINET and CHASSIS PARTS		
42	SJS5327	Socket (1)
42	SJS5519	Socket (1)
43	SJT345	Holder, Fuse (2)
SCREWS		
N1	XTB3+8GFZ	Tapping, $\oplus 3 \times 8$ (3)
N2	XTB3+8G	Tapping, $\oplus 3 \times 8$ (3)
N3	XTB4+10F	Tapping, $\oplus 4 \times 10$ (4)
N4	SNE2095-5	Tapping (2)
N5	XTBS3+8BFZ1	Tapping with Detent, $\oplus 3 \times 8$ (9)
N6	XTW3+8H	Tapping, $\oplus 3 \times 8$ (4)
N7	XTW3+8L	Tapping, $\oplus 3 \times 8$ (3)
N8	XTB3+16BFN	Tapping, $\oplus 3 \times 16$ (2)
N9	XTBS3+8BFYR1	Tapping with Detent, $\oplus 3 \times 8$ (4)
N10	XSN3+6S	$\oplus 3 \times 6$ (2)
N11	XTB3+10BFZ	Tapping, $\oplus 3 \times 10$ (4)
ACCESSORIES		
A1 (M)	Δ SJA170	AC Cord (1)
A1 (MC)	Δ SJA172	AC Cord (1)
A2 (M)	SQF12164	Instruction Book (1)
A2 (MC)	SQF12165	Instruction Book (1)
PACKING PARTS		
P1	SPP735	Polyethylene Bag (1)
P2	SPS4089-1	Pad, Left Side (1)
P3	SPS4091-1	Pad, Right Side (1)
P4	SPS3987	Pad, Upper (1)
P5 (M)	SPG4964	Inner Carton Box (1)
P5 (MC)	SPG4965	Carton Box (1)

[M]only

- SD-7010(SC-7010)
- SU-Z600,ST-Z400,RS-D200, SL-B211
- Outer Carton Box.....SPG5043
- Spacer.....SPS4490
- SD-7020E(SC-7020E)
- SU-Z600,ST-Z400,RS-D400, SL-B211,SH-Z200
- Outer Carton Box.....SPG5044
- Spacer.....SPS4491

EXPLODED VIEW

